OPEN MARKET SHARE REPURCHASES

AND THEIR SIGNALING POWER:

THE FRENCH EXPERIENCE,

1998-2006

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Abstract

In this research paper, we examined the conditions of the recent development of share buybacks in France, focusing on open-market repurchases. We showed that share buybacks have become a common practice for the largest French companies, and found a positive correlation between the relative amount spent on buyback programs and the long-run share price performance, tending to suggest a positive impact of buybacks on shareholders' value, in conformity with corporate governance principles. However, we found that immediate effect of buyback announcements is much smaller than in other countries, with an average abnormal return of 0.32% only, which we found can be explained by the quasi-universal and optional character of buyback programs announced in France, and by the ability of the market to make distinctions between buyback announcements, according to their objective and context, beyond the mechanically accretive impact of the operation.

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Index

Introduction ***4***

1- Motivations for share buyback programs ***7***

a. Share repurchases and dividends 7
b. Motivations guided by good corporate governance principles 8
c. Other motivations justifying a share buyback 11

2- Empirical studies made on buyback announcements ***15***

a. Open market repurchases vs. tender offers 15
b. Empirical studies on reactions to open market repurchase announcements in other countries 17
c. Empirical studies on French open market repurchase announcements 21

3- Share repurchases in the French stock exchange regulation ***23***

a. A particularly strict legislation before 1998 23
b. A late authorization, regulated by strict disclosure and execution obligations 25
c. Recent adaptations (European harmonization) 27

4- Empirical study on French buyback programs (1998-2005) ***28***

a. Data description 28
b. A contrasted development of share buybacks since 1998 29

5- Analysis on long-run performance of repurchase companies' share price ***37***

6- Event study: abnormal returns following open market share buyback announcements (1998-2006) ***40***

a. Methodology 40
b. Empirical results on abnormal returns 42
c. Case studies: adverse market reactions following buyback announcements 46

Conclusion ***49***

Introduction

Share buyback programs have been a common practice for a long time in the United States and the United Kingdom, before being authorized in France in 1998. This technique, promoted by the principle of shareholders' value creation, has developed at a very high pace in Anglo-Saxon economies, in a very flexible legislative framework on open market interventions. With this dramatic development, the concept of shareholders' value creation has also developed in continental Europe, and several countries, including France and Germany, have launched a debate on open market shares repurchases, many companies expressing their will to buyback their own shares, for different reasons.

Before September 1998, the general principle applied in France was the prohibition of shares buybacks, for the reason that a company should not be its own shareholder, with only a few exceptions. That situation did not allow companies to launch buyback programs as part of an efficient financial management policy. The 1976 Second Company Law Directive of the EEC, which regulates the basics of corporate finance in Europe, has given a large flexibility to European Member States in the legislation of capital markets, opening the possibility of share buyback programs on European stock exchanges. In 1998, general debates launched in France, Germany and other European companies have lead European countries to review their legislation on share buybacks, and notably to declare the general principle of authorization. In France, this principle has been set up by the 2 July 1998 Act and applied on 6 September 1998 by the Rules 98-02 and 98-03 of the French stock exchange watchdog, the COB ("Commission des Opérations de Bourse"), now replaced by the AMF ("Autorité des Marchés Financiers"). Since then, the general principle is now the authorization of shares buybacks.

In 1998, only a few large French companies, which had been lobbying for a general authorization of share buybacks, have immediately launched buyback programs, e.g. allowing them to unwind important cross-shareholdings. But this practice has become more and more common among French companies, and a few large buyback programs have known important media coverage, leading to the widespread feeling that French companies did not have profitable investment projects any more, and that share buybacks was the only use of cash they found in order to avoid destroying shareholder's value. Whereas the primary role of capital markets was initially the financing of companies by investment capabilities of public investors, expected shareholder's returns would be so high that they would restrain companies from investing, thus forcing them to return always more cash to their shareholders.

Beyond this media coverage of the phenomenon, what is the statistical reality of French buyback programs since their authorization in 1998? To what purpose are buyback programs launched by French companies, and what is their impact on shareholders' value?

Before studying the reality of buyback programs in France, we will first briefly review in our first two sections the economic research on share buybacks, in order to establish the different reasons, which could lead a public company to launch such a program on its own shares, and to determine which market reaction should be expected following these buyback announcements. We will see that, despite an average positive abnormal return following announcements experienced by economic research, there are good and bad motivations, i.e. some which can be value-creating for shareholders, but also some which can only hide a lack of prospect for the company, trying to hide a deterioration of the profitability of the company, or even others that can be value-destroying for shareholders, e.g. if they are used as takeover deterrent.

As a first step of our empirical study on French buybacks, we will then analyze the general evolution of share buybacks in France, in order to better apprehend this phenomenon as a whole. We examine the evolution of the national legislation, from the prohibition to the general authorization and the recent European harmonization policy, and compare it to other legislations, in order to understand how this national legislation affects the development of share buybacks in France, but also the market reaction to buyback announcements. We will then consider an economic viewpoint, to apprehend the general evolution of buybacks, focusing especially on their size, motivations, on the way companies communicate about them and on the general market reaction to share buybacks. We show that share buybacks have become a common practice for the largest market capitalizations, and that there is a positive correlation between the relative amounts spent on share buyback programs and the long-run performance of the stocks, tending to suggest a positive impact of buybacks on shareholders' value, in conformity with corporate governance principles.

Finally, our last section focuses on buyback announcements, in order to understand their true motivation, the reaction of market participants and the impact of the buyback on shareholder’s value. We will determine if an average positive abnormal return can be experienced for French buybacks, which could be an indicator of the validity of these programs. Our two most important results are derived from this event study: we show that the particularly small abnormal return experienced in France may be explained by specificities of French buyback announcements (quasi-universal and optional character of the mandatory AMF filing), which tend to lower the signaling power of such announcements, and by the ability of the market to make distinctions between buyback announcements, according to their announced objective and context, beyond the mechanically accretive impact of the operation.

1- Motivations for share buyback programs

a. Share repurchases and dividends

Considered as an alternative way to dividends to return excess cash to shareholders, share repurchases are essentially equivalent to dividends, if taxes and transaction costs are not taken into account. Both should convey the same message, revealing to investors that the firm has generated a sizeable cash flow. To illustrate this, DANN (1981) and VERMAELEN (1981) have studied share price responses to share repurchase announcements. Focusing on tender offers launched by companies on their own shares, they showed an average 16% return on announcement date, much more than the reaction to significant dividend payout decisions. For smaller repurchases, generally performed through open market repurchases, and thus at market price and in the absence of any premium, they also found that the reaction, although of a lower amplitude (at about 3%), was similar to the reaction to the initiation of a new dividend. These results suggest that buyback and dividend payout announcements convey the same message to investors: both indicate that the firm has generated a sizeable cash flow and is able to distribute it to shareholders without placing itself in financial distress.

However, in the signaling theory, dividends increases and share repurchases cannot substitute for each other. A dividend payout policy is considered as a long-term strategy, which should indicate the managers' confidence in their ability to generate profit on the following years. Indeed, a dividend cut will be considered as a dramatic signal given to the market that the management is not confident in the profitability of the company, since they will not be able to maintain payout ratio (dividends paid / total earnings) to a similar level as over the previous years. Thus an increase in dividend provides the market with an important signal, since it is considered by the market as a "commitment" to pay a comparable dividend over the following years, which requires a good certainty on free cash flow generation through the company businesses. Alternatively, a share repurchase program will more often be considered as a one-off action, a punctual way to return cash to shareholders, without any indication given to the market that the company will distribute more cash in the future. Therefore, the signaling theory would rather recommend share repurchases for a company having temporary excess cash (for instance due to asset disposals, or unwinding of cross-shareholdings), limiting the payment of higher dividends to companies knowing with a sufficient certainty that their businesses will allow them to pay a higher dividend on a recurring basis.

Finally, on tax efficiency purposes, we will see later that dividends and share repurchases do not have the same effect for shareholders, since many national legislations impose a higher tax rate to investors' income (to which cash dividends belong) than to capital gains, under which come gains realized after the sale of a share in a share repurchase program. Then, for tax efficiency purposes, share repurchases can be an alternative to dividends payment, although both operations do not convey the same signal to capital markets.

b. Motivations guided by good corporate governance principles

Economic literature is abundant on managers' motivations to launch buyback programs. Most are aimed at shareholders' value creation, justified by right corporate governance principles. Those principles are those, which have lead national stock exchange authorities to legalize share buyback programs, in order to leave more flexibility in the financial management of the equity capital of public companies, and thus to make national exchanges more competitive compared to others, in order to increase the attractiveness of public quotation.

A first positive reason quoted for share repurchases aimed at shareholders' value creation is the distribution of excess cash to shareholders. A company should indeed not have on its balance sheet a large amount of unused cash, largely exceeding the financing needs of its ordinary business. Such a situation may incur following asset disposals, capital increases, or through a large generation of free cash flow from operations. Shareholders' value creation principle implies that every currency unit invested in a company must be invested and earn a return exceeding the weighted average cost of capital, so that the return obtained by shareholders correspond to business risks. Agency theory explains that large amount of cash should not be left to managers, in order to keep them out of making it easy, for example by building empires with cash that should be paid back to shareholders, or by investing in value-destroying projects, i.e. projects whose return is below the cost of capital, or simply if the company is running out of value-adding investments. JENSEN (1986) has stressed the dark side of financial slacks, resulting in agency conflicts: "The problem is how to motivate managers to disgorge the cash rather than investing it below the cost of capital or wasting it in organizational inefficiencies". According to this theory, companies should always avoid bearing cash surplus on their balance sheet, in order to discipline managers and avoid value-destroying investments, and should even be indebted, in order to force the firm to pay out cash, optimally leaving just enough cash to finance all positive-NPV projects. In a dynamic and flexible market, investors should be able to reallocate distributed cash and make better investment choices with it, diversifying their investments across businesses and countries, while the company should stay focused on value-creating projects in its expertise areas, instead of trying to grow always bigger, even if this growth means a destruction of value for shareholders.

But, as we will see later, buyback announcements may also be negatively interpreted by investors if they spread the feeling that a profitable and growing company is running out of value-adding prospects. A share buyback program has to be proportionate, reasonable, and accompanied by confident statements on planned investments, value-adding projects and future earnings and cash flows, so that the market does not fear that the buyback may hide difficulties to develop new profitable projects.

Thus, if a proportionate share buyback program is announced by a company known for its good corporate governance, and motivated by the distribution of cash surplus to shareholders, the market reaction to such an announcement should not be so strong, since it would be considered as a normal action, part of a good corporate governance policy and not a surprise for shareholders. A stronger reaction may arise when firms traditionally holding large cash surplus on their balance sheet announce a share repurchase program for the first time. In such a circumstance, the market often applies a discount, justified by an inefficient use of funds invested by shareholders. The announcement, generally expected by analysts and investors (in the form of extraordinary dividend or share buyback), can induce a re-rating of the stock, and thus an important rise of the share price, far beyond the strictly mechanical accretive effect of repurchasing stocks and reducing the number of outstanding shares. Thus, we should expect a much stronger positive market reaction at announcements made by companies where managers' and shareholders' interests are less aligned, or where investors express skepticism on investment decisions made by managers.

The opportunity of such a buyback to return excess cash to shareholders is even more justified in periods of low interest rates, when keeping cash at bank does not yield a sufficient return to companies. Share repurchases are then an accretive action for the company, resulting from the difference in returns of cash at bank and company's investments.

Another main quoted reason, developed as an important part of the signaling theory, is the undervaluation of the company's shares, compared to inside valuation made by managers. Due to asymmetric availability of information, managers have a better knowledge of the true value of the company's shares, and if they act in line with shareholders' interests, they should make efforts to maximize shareholders' value, and thus the company should repurchase its own shares on the market if and only if they estimate the true value of the share exceeds its prevailing market value.

Studies made on open market share repurchases announcements in the USA have shown that such announcements are often an appropriate and efficient way of signaling such an undervaluation to the market. Indeed, it can seem obvious that managers have a better knowledge of the true value of the equity claims of their company than outsiders. But it is more difficult to convince the market that this true value is not reflected by the market without giving it private information on strategic actions planned by the company. According to the hypothesis of semi-strong market efficiency, only the public disclosure of new information can affect the price of an asset, and consequently managers could not make their stock price increase without making new information public. A straight claim that the stock is undervalued shall not convince market agents of an undervaluation. But if the company's managers are aligned with shareholders' interests, the company should not buy any of its own shares if they were not undervalued, i.e. if it bought them at a lower price than its true value. Otherwise, if they repurchase overvalued stocks, managers anticipate a decline in the share price to the intrinsic value, and thus expect a loss from such a transaction. By the way, through public announcement of the buyback program, it can also help placing a stock neglected (or forgotten) by investors in the limelight, making it more popular and increasing its trading volume. Thus, if managers act following good corporate governance principles, share repurchases should give a strong signal to the market, and be followed by an increase in the stock price.

Finally, share buybacks might be aimed at an optimization of a company's capital structure. Although the question of the existence of an optimal capital structure still does not make a clear consensus among economists, most of them tend to conclude that such an optimal capital structure does not exist, because the size of a cake does not depend on the way it is cut. But if it is unclear, whether one can "optimize" a capital structure, an important share buyback may significantly increase the company's gearing (i.e. its debt-to-equity ratio), thus resulting in an important wealth transfer from debt holders to shareholders, making debt much more important and less secure.

In order to avoid such a wealth transfer, most European countries, including France, have limited to 10% the maximum proportion of its total shares that a company can repurchase on the market over a certain period of time (generally fixed at 18 months). The number of shares cancellable is also often limited, thus reducing the possibilities to reduce capital and increase the gearing. This only allows companies to make small adjustments ("fine-tuning") to their capital structure, for instance in order to avoid dilutive effect of new small share issues reserved to employees for instance, or of securities giving access to capital (e.g. convertible bonds, or stock options incentive plans). Following such an operation, a share buyback may allow a company to leave its number of shares unchanged, to avoid a decrease in earnings per share, or maintain a reference shareholder at a certain level of its capital, for instance at majority or one third of capital.

As a consequence, we should expect moderate or marginal buybacks by companies with significant employee stock options incentive plans, in order to avoid dilutive effect of these plans. Such buybacks, aimed at marginally optimizing a firm's capital structure, do not provide any new information on the company's prospects, and aimed at leaving the capital structure unchanged, should not result in high reaction of the share price at announcement.

c. Other motivations justifying a share buyback

Share repurchases have proved to be a powerful arm to fend off a takeover attempt. Reducing the number of free floating shares, a share buyback can make it more difficult for a raider to obtain a majority of shares on the market. BAGWELL (1991) has examined their use as a takeover deterrent, and showed that the cost of a takeover tend to be greater for the acquirer "if the target company distributes cash through share repurchase rather than if it chooses either to pay cash dividend or to do nothing". Such a relation between the takeover cost and share repurchases is not obvious, since a cash distribution reduces both the cost of the takeover, but also its benefits by the same amount, since the company has reduced its cash at bank. The reason is due to the heterogeneity of valuation estimates among shareholders, which will segregate shareholders in the event of a share buyback. BAGWELL showed that shareholders willing to tender their shares through share repurchases are generally those with the lowest valuation estimates on the share, thus leaving the company with a pool of shareholders with higher valuation estimates, which consequently increases the takeover cost. If her model was primarily based on the assumption of a proactive share buyback, when managers fear a possible takeover, the first-mover advantage does not seem vital for this strategy. BAGWELL showed indeed that share repurchases can also constitute an efficient defensive action in response to a takeover bid, if the management succeeds in repurchasing shares of investors with low valuations estimates before they tender their shares to the raider. They do not need to buy back half of the capital to fend off the takeover, it is sufficient that the median shareholder (on the demand curve for shares modeled by BAGWELL) has a valuation estimate sufficiently high, so that the takeover price is not profitable.

However, if the interest of reducing floating shares and leaving the raider face shareholders with higher valuation estimates seems logic, legislations limiting the maximum number of shares bought back through open market transactions to 10% of total shares reduce the probability of such a strategy succeeding in fending off a takeover. And the length of the process of a public tender offer on own shares generally makes it inappropriate in anti-raid defenses. But even if restricted to 10% of total shares, a share repurchase may still constitute one part of a whole defensive strategy decided by the incumbent management, and make it more difficult for a raider to gain a majority of the company's capital.

A share repurchase motivated by takeover deterrence does not contribute to shareholder's value creation, since takeover bids generally allow shareholders to get a higher value by tendering their shares to the raider, thanks to the control premium offered. Consequently, share repurchases announced as a defensive action against a takeover bid should not be welcome by the market, which will see them as a source of value destruction.

The same reasoning should cancel all positive effects of buyback announcements if investors believe a share buyback is aimed at fending off a takeover bid.

Finally, in the absence of any of the previously quoted motivations, share buybacks can also be conducted in order to serve the interests of certain shareholders. Managers might indeed choose share repurchases in situations where they have interest in increasing or diluting holdings of those shareholders, to whom they can belong. An important shareholder not tendering his shares to the buyback would see its control on the company increased, thanks to the dilution effect on shareholders tendering their shares. Thus, this could be a mean of gaining "passively" more control over the company, i.e. without having to acquire more shares or to launch a public offer on the whole capital.

Since such a buyback would not reveal any information on the company's future cash flows, it would have no significant impact on the value of the share, or maybe even a negative impact, given the effective cost of such a buyback (transaction costs, potential loss on the transaction…).

We have thus seen that there are several different motivations for managers to announce a share buyback program. Some of them are clearly dictated by good corporate governance principles, such as the signaling of an undervaluation of the stock, the distribution of excess cash or small adjustments to the capital structure to avoid dilution effect of employee incentive plans. We should thus expect a positive market reaction to their announcement, since they are directly or indirectly aimed at enhancing shareholders' value creation. In these situations, share repurchases are an efficient way to achieve their goal, and are an especially strong signal of the managers' confidence in the future cash flows of the company, if they are well calibrated, in order to leave the company just enough cash to invest in value-adding projects, without compromising its future. It is indeed important that the market interprets them as parts of good corporate governance policy, and not as signs of a lack of profitable prospects.

But in other cases, these buybacks can also have negative impact if they are not aimed at enhancing shareholders' value creation, for instance if they are used as takeover deterrent, or to facilitate control gain for incumbent large shareholders or managers. Thus, according to corporate finance theory, there is no systematic reaction to share repurchase announcements, and reactions depend on the managers' intentions and on investors' interpretation and beliefs on these intentions. We will see in the following sections that empirical studies made in many countries confirm these theories, before analyzing French buybacks announcements.

2- Empirical studies made on buyback announcements

a. Open market repurchases vs. tender offers

National legislations generally offer two possibilities for companies to conduct a share buyback: open market repurchases and tender offer on their own shares (called "OPRA", for "Offre Publique de Rachat d'Actions" in France, similarly to the well-known "OPA" and "OPE" for public offers on other companies' shares). The purpose of this section is not to go into detail on national legislations, which will be tackled by the next section. But in countries offering these two possibilities, tender offers are generally more complex and longer to implement than open market repurchases. Indeed, in countries where open market share buybacks are limited to 10% of the company's outstanding shares, the tender offer provides companies with an opportunity to repurchase a larger part of their capital. But this larger freedom has to be regulated by stricter legal obligations, in order to give all shareholders accurate and comprehensive information on the company and the opportunity to all tender their shares and take advantage of the premium generally offered by the company. In France for instance, due to a specially strong care about the equal treatment of shareholders, tender offers on own shares were authorized under certain conditions before the general authorization of open market repurchases, but the regulation was so strict, in order to protect all debt holders and shareholders, that the process could last over an average of 110 days (more details in the next section, on regulations), making share repurchases an exceptional action in a company's life, only punctual and inadequate for the day-to-day management of a company's capital. Now, tender offers have been simplified and shortened, but are still a complex and long process, due to the special care required to protect incumbent debt holders and give equal treatment to all shareholders.

Much economic literature has studied the impact of share repurchase announcements on the share price of a company. Empirical literature is particularly abundant on US markets, where share buybacks have been a common financial management operation for a long time. Perceived as a good corporate governance action, share buyback announcements should be immediately followed by a positive reaction of the share price, if the market considers the announcement as credible. But since they are not employed in the same circumstances, tender offers made by companies on their own shares and open market share repurchases have different impacts on the share price.

Empirical studies based on abnormal returns have showed that although announcements of both types of share buybacks were followed in average by significant positive abnormal return, stock price reactions to tender offers are on average at least twice as large as reactions to open market repurchases. DANN (1981) and VERMAELEN (1981), in their study of share price responses to share repurchase announcements, have focused on tender offers launched on US markets by companies on their own shares, during which an average of 15% of companies' shares have been repurchased, the results of their study showed an average 16% return on announcement date, much more than the reaction to significant dividend payout decisions. This is mostly due to the premium offered by the company over the prevailing share price, which was in average of 22%. For smaller repurchases, generally performed through open market repurchases, and thus at market price and in the absence of any premium, they also found a reaction similar to the reaction to the initiation of a new dividend, but of a much lower amplitude (3.7% for VERMAELEN). These results suggest that buyback and dividend payout announcements convey the same message to investors: both indicate that the firm has generated a sizeable cash flow and is able to distribute it to shareholders without placing itself in financial distress. In addition, they suggest that reactions to buyback announcements are positive (in average) and increasing with the size of the fraction of shares repurchased.

COMMENT and JARRELL (1991) have compared the relative signaling powers of three forms of share repurchases: Dutch-auction and fixed-price self-tender offers, and open market repurchases. In a traditional fixed-price self-tender offer, a fixed price is specified, as well as the number of shares sought and the expiration date. The fixed offer price should give the market a signal on the extent of the share price undervaluation. In Dutch-auction offers, the number of shares is also specified, but instead of a single price, the offer specifies a range of prices, within which each tendering shareholder chooses his or her minimum acceptable selling price. In this auction-like process, the final offer price is the minimum price fetching the number of shares sought. The minimum offer price is generally fixed at a few percent over the market price prevailing before announcement of the offer, thus allowing owner-managers to guarantee a lower price than through fixed-price offers. Consequently, the signal sent to shareholders appears less credible, especially since Dutch-auctions offers are less informative than fixed-price offers, in the absence of a precise estimate of share price undervaluation by inside managers. But, in comparison, if open market share repurchases are considered as excellent vehicles of returning cash to shareholders, they do not seem to be the most effective way of signaling a share price undervaluation, since they are spread over several months, if not years. The empirical study showed that fixed-price self-tender offers result in an average excess return of 11.9%, compared with under 7.7% for Dutch auctions, while open market repurchase programs induce an average excess return of only 2.3%. But restricting the sample of companies choosing open market repurchases to those offering to repurchase more than 20% of shares, the excess return following announcement reaches 6%, thus almost in-line with Dutch-auction offers of comparable fractional size. This result shows that large open market share repurchases, without offering any premium paid on prevailing share price, can signal stock undervaluation almost as effectively as Dutch-auction tender offers. More generally, they confirmed that, if managers do not tender their stocks and in absence of any takeover threat, "the effectiveness of a repurchase as a signal would be greater i) the greater the stockholdings of inside managers, ii) the greater the offer's premium over the pre-offer market price, and iii) the greater the fraction of outstanding stock sought in the offer".

b. Empirical studies on reactions to open market repurchase announcements in other countries

If studies quoted so far have showed a much smaller reaction to open market repurchase announcements than to self-tender offer announcements, much empirical studies have also focused on the signaling power of open market share repurchases, and on their general impact on share price, immediately following buyback announcement.

In the following table (**Table 1**), HACKETHAL and ZDANTCHOUK have summarized empirical studies found on abnormal returns following open market repurchase announcements in eight countries. The table provides with information on the dataset used (number of announcements and period studied), and gives Cumulative Abnormal Returns (CAR) found on the event window chosen (expressed as [-i;+j], signifying the abnormal return is calculated between i days before announcement to j days after).

Table 1: Prior empirical results on cumulative abnormal returns (CAR) from announcing open market share repurchase programs

Country	Study	Window	CAR	Data (number, period)
US	McNally (1999)	[-1;+1]	2.5%	702 (1984-1988)
	Grullon / Michaely (2004)	[-1;+1]	2.7%	4,443 (1980-1997)
	Vermaelen (1981)	[-1;+1]	3.7%	243 (1970-1978)
	Stephens / Weisbach (1998)	[-1;+2]	2.7%	591 (1981-1990)
	Ikenberry / Lakonishok / Vermaelen. (1995)	[-2;+2]	3.5%	1,239 (1980-1990)
	Comment / Jarrell (1991)	[-1;+1]	2.3%	1,197 (1984-1988)
Australia	Lamba / Ramsay (2000)	[-1;+1]	3.3%	103 (1989-1998)
Canada	Li / McNally (1999)	[-2;+2]	3.6%	183 (1989-1992)
	Ikenberry et al. (2000)	[-15;+15]	0.9%	1,060 (1989-1997)
Germany	Schremper (2002)	[-1;+1]	4.1%	112 (1998-2000)
	Gerke et al. (2003)	[-1;+1]	6.1%	120 (1998-2000)
	Seifert / Stehle (2003)	[-1;+1]	5.9%	192 (1998-2003)
	Hackethal / Zdantchouk (2005)	[-1;+1]	6.0%	224 (1998-2003)
Japan	Zhang (2002)	[-1;+2]	6.0%	39 (1995-1999)
Korea	Jung / Lee (2003)	[0;+5]	2.8%	382 (1994-1998)
Switzerland	Dumont et al. (2004)	[-2;+2]	1.8%	10 (1999-2003)
UK	Rau / Vermaelen (2002)	[-2;+2]	1.1%	126 (1985-1998)
	Oswald / Young (2002)	[-1;+1]	1.4%	266 (1995-2000)
	Rees (1996)	[-2;+2]	0.3%	882 (1981-1990)

Source: HACKETHAL Andreas / ZDANTCHOUK Alexandre (2005) "Signaling power of open market share repurchases in Germany"

In the United States, most studies have given evidence of the efficiency of share buybacks to signal stock undervaluation. Several studies, including COMMENT and JARRELL (1991), and STEPHENS and WEISBACH (1998), have showed that the positive market reaction following buyback announcement was negatively related to the stock performance relative to the market during the days before announcement. This would suggest that firms decide to repurchase more or less shares in function of their perceived undervaluation. IKENBERRY, LAKONISHOK and VERMAELEN (1995) have examined the long-run performance of stocks after buyback announcements, and found significant results supporting the undervaluation signaling theory. Focusing on the US markets, between 1980 and 1990, they have found an average four-year buy-and-hold return after initial announcement of 12.1%. In order to test the undervaluation signaling efficiency of these announcements, they have separated companies according to their book-to-market value ratio (or inversely price-to-book ratio). They found that "value stocks", those with low price-to-book ratios, showed an impressive average abnormal return of 45.3%, while "glamour stocks", less likely to be undervalued, showed no significant drift after announcements, apparently neglecting the informative content of a share buyback. As stated by COMMENT and JARRELL (1991), IKENBERRY, LAKONISHOK and VERMAELEN have also confirmed that abnormal returns were higher when inside managers held a significant fraction of shares, making the undervaluation signal more credible when their wealth is at risk.

Other studies (such as BAGWELL and SHOVEN (1988)) have also confirmed the positive relation between stock price reaction at announcement and the availability of cash surplus on the company's balance sheet. Share repurchases seem to be an effective vehicle to restrict the possibility for the management to waste funds on value-destroying projects and communicate to the market these restrictions and the adequate use of funds invested.

DENIS (1990) has examined defensive payout decisions in response to hostile corporate control activity, and showed that, while special dividends generally induced an increase in wealth of the target's shareholders, defensive share repurchase announcements generally produced an average negative impact on the target company's share price. Generally part of a whole defensive strategy, those repurchases are generally associated with a high rate of success in maintaining the target company's independence, which partially explains shareholders' wealth losses. According to DENIS, this negative impact could also come from the increase in managerial control in voting rights, but not in cash flow ownership. Since repurchased shares are do not bear any more voting rights, the control of managers on the company would thus become more important, but without any increase in their wealth at risk and in their fraction of cash flow earned. Thus his study tends to confirm that defensive share buybacks in response to hostile approaches should be consider as acting against the interests of shareholders, and therefore we should expect a negative abnormal return on their announcement.

And KAHLE (2002) has studied the impact of total and executive options on the decision to repurchase shares. She has showed that the increase in buyback announcements in the 1990s was mostly explained by the change in compensation policy, more and more companies offering stock options incentives to their managers and employees. Managers would then launch buybacks in order to maximize their own wealth as well as to fund employee options plans. In that context, although the motivation seems recognized and accepted by the market, KAHLE showed that the signaling power of such buyback announcements were lower, share undervaluation being less characterized in buybacks motivated by the funding of stock options plans than for buybacks primarily focused on signaling a significant undervaluation.

In other countries where studied have been performed, results tend to confirm the existence of positive abnormal return following share repurchases announcements. But the extent of the positive reaction seems to depend largely on the characteristics of national regulations, which have an important impact on the credibility of buyback announcements. Indeed, as shown by IKENBERRY and VERMAELEN (1996), legislations generally permit firms to repurchase shares, giving them a valuable option, but do not force them to do so: managers aligned with shareholders' interests will tend to repurchase shares when they consider them as undervalued, and not immediately after announcing their intention to launch a buyback in the United States, or after seeking approval by the AGM, in countries where it is required. Consequently, the positive impact expected following announcement is largely dependent on the credibility of the signal, i.e. on investors' belief on the actual fraction of shares the company is going to repurchase. For instance, Germany, characterized by a stricter regulation than the United States (notably due to the obligation to require approval by the AGM, and to announce the start of effective open market buybacks, while American firms only need a Board announcement of their intention to repurchase shares), tends to have less negative abnormal returns following announcements, since the cost of sending a false signal is high. Since an actual buyback in Germany induce two different announcements, one for seeking AGM approval, and another before launching the actual buyback, the market reaction should be measured at the two successive events. HACKETHAL and ZDANTCHOUK (2005) have thus showed that the average reaction to was about 12% between the day before the first announcement (company seeking AGM approval) and the day after the second announcement (launch of actual buyback), far more than the 3.5% found in the United States. This difference illustrates the effect of a more stringent regulation, making the announcement look more credible to investors. On the opposite, in the United Kingdom, regulation has made it more difficult to signal a significant undervaluation through buybacks, prohibiting open market repurchases in a period of two months before earnings publications, as well as when directors are in possession of private price-sensitive information. As a result, stock price reactions to open market repurchase announcements in the United Kingdom are far less significantly positive than in other countries, due to the weakness of the undervaluation signal.

c. Empirical studies on French open market repurchase announcements

So far, we have found only one significant empirical study on abnormal returns following French share repurchase announcements. GINGLINGER and L'HER (2002) have found that announcements of open market share repurchases in France were followed by an average abnormal return of 0.57% on the day of the announcement. They showed that this effect was more important for smaller firms (secondary market, new market) or those which had reported poor results before announcement. This would tend to confirm the undervaluation signaling theory, since these smaller firms are more likely to be less covered by brokers and thus to have more information asymmetry, and to be undervalued due to poor recent share price performance following announcements. They also focused on the influence the ownership structure of companies on the market impact of buyback announcements. Their study stressed that the impact of open market share repurchases could not be studied independently of the ownership structure and corporate governance mechanisms of the firms. For instance, their study showed that the informative content of share buybacks was less important when companies were family-controlled than for companies controlled by institutional investors, due to the large difference between cash flow rights and voting rights, reinforcing the control of the family on the firm, the minority shareholders being less protected than in firms with an outside reference shareholder for instance.

The low number of studies on abnormal returns following French share repurchase announcements is certainly due to the quite recent development of these operations, as well as to specificities of the French disclosure obligations. In order to estimate the market reaction to French buybacks, GINGLINGER and L'HER have considered the date of the filing of the repurchase program registration statement by the AMF (ex. COB), which corresponds to the initial announcement date of buybacks in 90% of cases. But as we will see later in our empirical study, 36 out of the 40 companies in our sample have filed a repurchase program registration in 2005, but the proportion of companies having effectively repurchased shares, or even intended to repurchase shares, is significantly lower. For large companies, with complex financial management mechanisms, the filing of such a statement is only a common option, voted on a yearly basis by the Ordinary General Meeting of shareholders, which should be far less common for smaller companies. Therefore, it is doubtful that the market will react to these filings for large companies as it will do for smaller ones, and we can suggest that the market will expect credible announcements of actual share repurchases, considering the filing only as a common option, not a commitment at all for the company to repurchase its shares. In the next sections, after first reviewing the French stock exchange regulations on this subject and compare it to other legislation, we will investigate the influence of this regulation on the actual realization of share buybacks by French companies, as well as market reaction to these buybacks. We will notably try to study market reactions on credible announcement dates, when companies announce they are actually going to massively repurchase shares, which may be different from the date of the AMF filing.

3- Share repurchases in the French stock exchange regulation

KIM, SCHREMPER and VARAIYA (2004) have conducted a large survey on national regulations on share repurchases, comparing the regulations in the ten largest stock exchanges in the world: the United States, Japan, the United Kingdom, France, Germany, Canada, Italy, the Netherlands, Switzerland, and Hong-Kong, cross-examining restrictions on disclosure as well as execution of share buybacks. Such an international comparison of repurchase regulations is not our purpose, but we retranscribe a table summarizing their results in **Appendix 1**, for information purposes. The main purpose of this section is to analyze the most important aspects of the French stock exchange regulation regarding stock repurchases, eventually comparing them with other regulations (especially the US regulation), in order to determine how they can affect the efficiency of share repurchases. For that purpose, we will examine the successive regulation changes following the four questions distinguished by KIM, SCHREMPER and VARAIYA, which considerably affect the impact of share buybacks on stock prices:

i) Whether a prerequisite for the share repurchase is an approval at the shareholder meeting or whether just a board approval is sufficient,

ii) Whether there is any restriction on repurchase prices, repurchase volume, and timing of repurchase,

iii) What are the disclosure requirements,

iv) Whether there is any restriction on insiders' trading activity in relation to repurchase trading activity.

a. A particularly strict legislation before 1998

For a long time, France has been reluctant to share repurchases, for the reason that it was conceptually disturbing that a company may be its own shareholder. While share buybacks have developed at a very high speed in the United States and the United Kingdom in the 1990s, allowing companies to adjust their capital and becoming a popular and flexible corporate payout method, they were not illegal in France, but their execution was particularly long and difficult.

Before September 1998, the general prevailing principle was the prohibition, due to the aversion to the principle of a company being its own shareholder, but also to a constant care about the protection of debt holders and individual shareholders. The 24 July 1966 Act prohibited, in principle, the repurchase by a company of its own shares. It was also prohibited for a company to own more than 10% of its own shares, and to establish cross-shareholdings of more than 10% with another company. Such prohibitions induced a certain number of deviations, for instance companies repurchasing their own shares through subsidiaries or inside managers. Exceptions have been accepted in the 1966 Act, allowing companies to exceptionally repurchase their own shares in the following three situations:

i) in order to reduce their capital, in the absence of losses

ii) in order to fund employee incentive plans, through the attribution of own shares or stock options

iii) for quoted companies only, in order to regulate stock price fluctuations

Thus, only two opportunities were offered to public companies to repurchase their own shares for financial management of their capital. To reduce its capital, a company was obliged to launch a self-tender offer (named "OPRA", standing for "Offre Publique de Rachat d'Actions"), offering all shareholders the opportunity to sell their shares at a premium over prevailing share price. The operation, considered as exceptional in a company's life, had to be approved by Extraordinary General Meeting of shareholders, certified "fair" by auditors in a special report, accepted by ALL creditors of the company, and immediately followed (within the following month) by the cancellation of the shares repurchased (the conservation and other uses of these shares being prohibited). This process was therefore exceptionally heavy and complex, and could last approximately 110 days, thus not allowing buybacks as part of an ordinary financial management policy. It was even prohibited in the presence of convertible or exchangeable bonds. To make it even less attractive, capital gains made by individual shareholders tendering their shares were taxed as capital incomes, and not as normal capital gains, which would benefit from a lower tax rate. The other exception, the stock price regulation, was also considered as inadequate for companies willing to implement repurchases as part of a financial management policy. Approved and restricted by the Ordinary General Meeting of shareholders (restricted in terms of price range, fraction of shares sought, period authorized for the repurchase, within the limit of 18 months), these operations had to be realized against the share price tendency, aimed at reducing the excessive share price fluctuations, in both directions. Consequently, the process made it illegal and impossible for companies to repurchase their shares on the market for an economic management of their capital, but frequently lead companies to only intervene against downward trends, thus systematically sustaining the stock price in bearish markets. And the cancellation of shares acquired through this channel also required the approval of the Extraordinary AGM, certified by a special report made by auditors, and with a veto right given to every creditor of the company. Thus, while flexible US and UK legislations have enabled the early and accelerated development of buybacks as a common financial management operation, the French regulation made it exceptionally difficult for companies to repurchase their own shares for capital management.

The Second EC Directive on Company Law 77/91 of 13 December 1976 has given to companies of EC Member States a large freedom for buying back their shares, subject to conditions aimed at protecting creditors. It has implicitly allowed a certain freedom of action on up to 10% of capital, thus permitting an economic and financial management of its own shares by a public company. In 1997, stimulated by an intensive lobbying campaign lead by some large companies, a general debate has been launched in France, in order to take advantage of the possibilities offered by the Directive and to make the national legal framework on share buyback more flexible. Its result was the 2 July 1998 Act, completed in September by COB Rules 98-2 and 98-3, which gave a general authorization to companies to repurchase their own shares, allowing a flexible capital management policy.

b. A late authorization, regulated by strict disclosure and execution obligations

Since the 1998 law reform significantly simplified their execution, share buybacks have become increasingly popular in France, as surveys published by the AMF confirm it (cf. **Section 4.b**). Companies are now generally authorized to repurchase shares, but under relatively strict restrictions and disclosure obligations. First, the 1998 regulation has restricted buyback programs in order to avoid massive capital structure changes, as well as massive wealth transfers from debt holders to shareholders. It authorizes open market share repurchases for a fraction up to 10% of total shares, within a maximum period of 18 months. The self-ownership of more than 10% of its own shares is prohibited, and the cancellation of these shares, accepted by the Extraordinary AGM, is limited to 10% of total shares over a period of 24 months. Share buyback beyond this 10% limit are not impossible, but require the implementation of a public offer ("OPRA"), which, despite simplifications, remains a quite heavy procedure, decided by the Extraordinary AGM. Then, restrictions have been added to prevent share price manipulations through open market repurchases. The volume repurchased has to be lower than 25% of the average daily trading volume on previous five trading days, and is also restricted within the day, at start and end of trading days and suspensions, so that repurchases may not abusively affect the fixation of these prices. Simultaneously, executive managers ("Mandataires sociaux") have to declare to the COB/AMF all the transactions they make on their company's stock, in order to prevent them from making profit with inside information on share buyback timing. To complete this general authorization, the tax treatment of share buyback has been radically changed, so that investors tendering their shares in buybacks are now taxed under the capital gain system, which is far more favorable than the investor's income tax system ("IRPP" for individual shareholders, and "IS" for companies).

The main difference with Anglo-Saxon countries is the importance of disclosure obligations, mostly aimed at protecting minority shareholders and giving all shareholders the same access to information on buybacks. The 1998 regulation requires a double approval to conduct open market share repurchases, first by the stock exchange authority, the AMF, and then by shareholders, at Ordinary AGM. Companies must communicate a standard filing to the AMF, notably describing in details the characteristics of the buyback (size, considered uses of repurchased shares, intention to cancel them, maximum and minimum acquisition price, financing…), as well as the number of shares already repurchased, their affectation to different possible uses, the impact of the buyback on earnings per share, and the intentions of controlling shareholders regarding their holding in the capital. The five objectives retained by the COB were the share price regulation, the exchange of shares to pay acquisitions (external growth transactions), the funding of stock and stock options incentive plans for employees, the cancellation, aimed at EPS enhancement, and the conservation of treasury shares. In addition, companies have to declare to the COB/AMF, on a monthly basis, all shares they have actually repurchased, sold, transferred or cancelled. This information is published by the authority shortly after on its website (www.amf-france.org), so that this information becomes quickly public.

c. Recent adaptations (European harmonization)

We will not review the few minor changes which have been made between 1998 and 2003, since they have only marginally modified this legal framework, without changing its main features, as previously quoted. However, the EU Commission Rule 2273/2003 published on 22 December 2003 has significantly restricted the range of objectives allowed for a buyback program. Applied in France since October 2004, this Rule only allow open market share buybacks aimed at cancellation of repurchased shares, or at funding convertible securities or employee incentive plans (stock options…). As a consequence, conservation of treasury shares should not be considered as buyback objectives, and share price regulation should be externalized and performed by an independent intermediary (broker), through a liquidity management agreement ("contrat de liquidité"), the transactions executed by this intermediary within the agreement being reported separately, every six months. The purpose of these reforms is to avoid market abuses, sometimes allowed by very flexible regulations on buyback objectives. However, national regulatory authorities have been given flexibility in the application of these rules, so that common practices accepted in certain countries might be tolerated. Consequently, if these reforms are aimed at the convergence of share buyback practices in the EU, and at avoiding price manipulation through buybacks, buyback objectives are still not completely harmonized.

The disclosure obligations have also been strengthened, with the obligation for repurchase companies to declare their actual buybacks on a weekly basis, notably specifying for each trading day the number of shares acquired/sold, and the average transaction price. With these declarations published on the AMF website since October 2004, we now have a comprehensive database on all transactions made by companies on their own shares, enabling us to determine more accurately the reality and extent of buyback programs, and their exact calendar. Furthermore, the separate report of shares bought back within the liquidity agreement should enable to distinguish "buyback which are not buybacks", i.e. transactions only executed to enhance the stock liquidity. This should provide investors with more readable information on buybacks, and affect the share price reaction to buyback announcements, since the objectives announced will become more precise.

4- Empirical study on French buyback programs (1998-2005)

a. Data description

Since the purpose of our study is to examine the reality of share repurchase programs in France and their impact on companies' share prices, we have decided to conduct this analysis over the period going from September 1998, when buybacks have been generally authorized by the French regulation, to December 2005. We have decided to choose as sample the constituents of the CAC 40 Index, French 40 largest market capitalizations. Since this index has been significantly changed by the two recent IPOs of the French public utility companies, Gaz de France (July 2005) and EDF (November 2005), we have considered them as non significant, since both companies did not have any quotation history, and had not launched any buyback program yet. Consequently, we have adjusted our sample and replaced these two recently introduced companies by their predecessors in the CAC 40 Index, the media company TF1 and the retailer Casino Guichard-Perrachon (aka. Casino). Our sample is thus the list of the CAC 40 Index as of January 2005 (listed in **Appendix 2**, or in **Appendix 3.a** ranked by market values as of 3 January 2005), which enables us to study share buybacks announced by large companies from all main sectors of the economy. Among these forty companies, four of them where not listed in 1998, but where listed later, following an IPO (the French bank Crédit Agricole or the utility company Veolia Environnement (ex. Vivendi Environnement)), or a merger (the European aeronautics leader EADS, and the bank Dexia Belgium). For coherence purposes, we have chosen to keep the same sample over the entire period, even if data will be partially unavailable for these four companies, considering that a switch with other companies would introduce a more important bias and reduce the coherence of the sample. But we will take into account the changing number of companies in the sample to establish our statistical analysis.

We have essentially used Datastream database to get daily information on the forty stocks, such as price, volume traded, number of shares outstanding, market capitalization, dividend yield etc. The share price used are adjusted for share splits and extraordinary dividends, enabling to neutralize mechanical effects of these operations on share prices, to focus on real announcement returns, on a coherent basis.

Taking advantage of the French stringent disclosure obligations, we have based our study of effective buybacks on the information provided by companies to the "Autorité des Marchés Financiers" (AMF, and its predecessors COB and CMF), French independent public authority regulating and overseeing the financial markets. For each of the forty companies, we have downloaded all "Notes d'information" (prospectuses) required to get AMF Visas, since September 1998, as well as all monthly declarations of effective transactions on own shares published by these companies since September 1998, and all weekly declarations since December 2004 (1,387 monthly declarations since 1998, and 732 weekly declarations between December 2004 and April 2006).

Since declarations posted on the AMF website are actual and historical declarations, they are not adjusted for share splits and exceptional dividends. To be able to estimate the amounts spent on share buybacks, we have adjusted historical numbers of shares repurchased, sold, transferred and cancelled to take into account share splits and exceptional dividends, thanks to adjustment factors provided by Datastream, cross-checked with historical numbers of outstanding shares. As a consequence, the numbers of shares involved in transactions are often different from the numbers published by the AMF, since they have been divided by adjustment factors. Since monthly declarations posted on the AMF website before December 2004 only contained numbers of shares concerned, and not the average amount spent on these transactions, we have estimated this amount by multiplying the number of shares concerned over the month by the average share price on that month. Weekly declarations now disclose information on daily volume of transactions, as well as on the average acquisition price. To make the aggregation of all this data easier (over 700 weekly declarations, or eventually 3,500 daily transactions), we have considered this average acquisition price to be similar to the daily closing price, which, after cross-checks, occurs to be a very satisfying proxy of actual open market transaction prices. For large over-the-counter (OTC) transactions (included in our study, although not "open market transactions", but quite rare and to be taken into account in calculations of amounts spent in buybacks), we have taken into account the price disclosed by the company, since this one can be very different from prevailing market conditions (but always lower, in conformity with anti-market abuse legislation).

b. A contrasted development of share buybacks since 1998

AMF statistics on buybacks by all French quoted companies

Expected by French large companies for a long time, the authorization of open market share buybacks in France has immediately been followed by a surge in COB/AMF "Visas", which correspond to the approval of the filing submitted to the regulatory authority before AGM approval of a buyback program. Immediately after the COB Rules 98-02 and 98-03, on 25 September 1998, 10 companies had already received the COB approval for their buyback. Several of them were among the companies lobbying for the general authorization, for instance to be allowed to unwind cross-shareholdings (Saint Gobain, Suez-Lyonnaise des Eaux). Statistics published by the COB[1] on all public companies quoted on Paris Bourse show a clear enthusiasm for newly authorized open market share repurchase programs: the COB has granted 402 Visas in 1999 and 414 in 2000, which seems to confirm the interest of the new legislation for French companies. Although buyback approvals have declined by 13.3% between 2000 and 2003, their number remains relatively comparable, and objectives stated are quite constant over the period, with share price regulation being the main objective for a half of buyback programs authorized, followed by opportunistic interventions depending on market conditions (quoted as main objectives in about 30% of authorized programs). The funding of employee incentive plans, the exchange as payment of external growth operations and the cancellation of shares repurchased are equally massively quoted as possible objectives, but far less often as main objective. But these statistics also suggest that COB/AMF filings are generally considered by companies as a valuable option to repurchase shares following opportunistic objectives, rather than a genuine buyback announcement. More meaningful than the number of Visas granted, the number of firms having effectively executed transactions on their own shares is a better indication of the development of this practice. Significantly lower than the number of Visas granted, this number confirms that buyback approvals alone should not be considered as genuine announcements, but essentially as options kept by companies to eventually repurchase their own shares if their situation requires it. The number of Visas followed by effective trading on own shares by the companies should be a better indication of the real development of the practice: over the years 2000-2003, it increased significantly from 250 to 282, corresponding to fractions of 60% to 79% of granted Visas, suggesting an important success of share buybacks in France, since the number of operations has increased despite the decrease in the number of granted Visas. The

[1] « Revue mensuelle de l'Autorité des Marchés Financiers », No. 8, November 2004, pp. 130-132

AMF also published statistics on the amounts spent on these buybacks: their results are far more contrasted. While the number of active companies has increased from 250 to 282, the total amount spent by French quoted companies on share buybacks has decreased from €12.9bn to €10.3bn, after a huge peak at €23.2bn in 2001, partially due to September 11 attacks[2]. Over that period, although the largest companies ("Premier Marché") only represent 41% to 44% of companies trading on their own shares, they represent an average of 99% of the amount spent on buybacks. This percentage is obviously biased by the differences in market capitalizations of these companies, which does not allow establishing comparisons between small and large companies, but shows that the reality of buybacks is focused on few large companies. In order to get a better understanding of this evolution among large companies, we will focus on the 40 companies of our CAC 40 sample, and try to determine the reality of share buybacks in France between 1998 and 2005.

The development of buyback programs has known important media coverage over the last two years, some economists claiming that this capitalism was running out of prospects and thus did not have any alternatives to returning its cash to shareholders. This tendency would be self-destroying, says the well-known economist Patrick ARTUS[3], wondering if the primary markets will still have a role to play in this system, with less financing needs and more cash returned to shareholders. But as showed by the AMF in 2004, the situation is not so simple, with more than the half of amounts spent in share buybacks realized by only ten large companies over the period 2000-2003. The oil giant company Total S.A. alone was responsible for more than 25% of amounts spent in buybacks by all French quoted companies, with €15bn spent in four years, and an accelerating trend, reaching 40% of amounts spent by all French companies on buybacks in 2003.

<u>*Statistical study on the largest French market capitalizations (CAC 40 sample)*</u>

In order to get a better knowledge of this phenomenon, we have focused on our CAC 40 sample and collected all information published on the AMF website on share buyback programs of these forty companies on their own shares since September 1998. The first thing

[2] Following September 11 attacks, the stock exchange authority has largely allowed French quoted companies to trade on their own shares to maintain their troubled share prices. The amount spent on buybacks the month following the attacks is estimated by the AMF at about €3.5bn

[3] ARTUS P. / VILARD M.P. (2005) « Le Capitalisme est en train de s'autodétruire », La Découverte

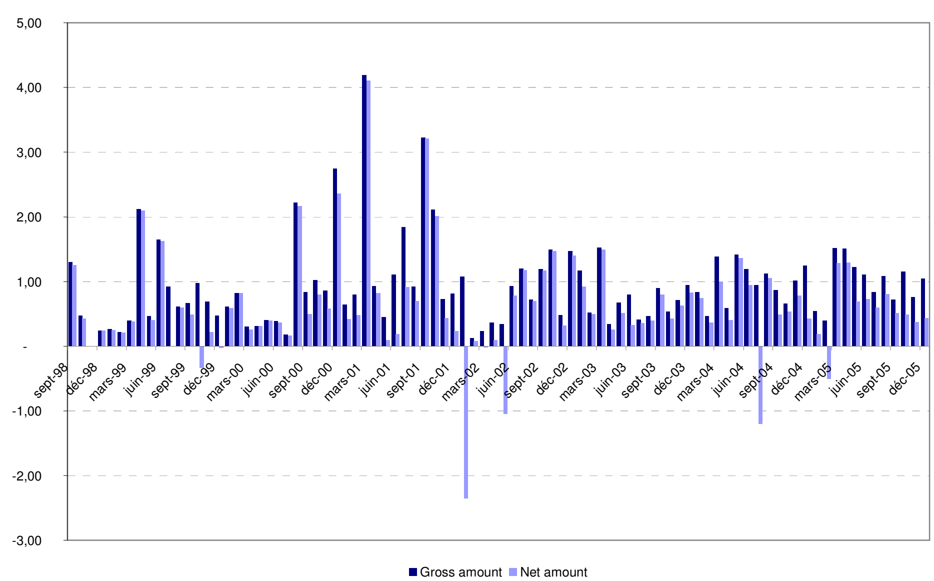
we have watched was the number of Visas granted by the COB/AMF each year since 1998. Then we have determined which companies were effectively active on own shares, on the basis of the declarations published by the AMF on its website. **Table 2** shows obviously what we had previously suggested: almost all companies of our sample have sought and obtained approvals for their buyback programs, but the number of companies having effectively repurchased shares is significantly lower, generally between 67% and 73% of the sample, confirming that large companies, which are the most likely to conduct a sophisticated financial management policy, systematically seek buyback authorization at their AGM, to have this option available in case they need to repurchase shares. However, on the basis of the number of Visas granted, we cannot distinguish "real buybacks", aimed at cancelling shares, and others, aimed at funding employee incentive plans or at share price regulation. To adopt a less binary approach, we have considered a threshold fixed at 1% of Market Value spent in repurchases, which seems to be relatively satisfying to discriminate companies significantly repurchasing shares, and companies only repurchasing small amounts of shares, to fine-tune their capital or fund employee incentive plans. We find that less than half of the companies having obtained a Visa during the year buy back a significant fraction of their shares, representing 45% of our CAC 40 sample in 2004-2005. Thus, these results confirm that share buybacks have become a common practice for most of the large companies, but also that buyback authorizations are now a common constituent of AGM decisions for these companies, and that the obtaining an AMF Visa does not commit companies to conduct a real share buyback. Consequently, it is not obvious that these Visas may be considered as true buyback announcements, since they are almost systematic among CAC 40 companies.

Table 2: Comparison of numbers of companies seeking COB/AMF Visa and companies effectively acquiring own shares through open market repurchase

	1998	1999	2000	2001	2002	2003	2004	2005
Number of companies:								
- Seeking approval	8	30	33	32	35	38	39	37
- Acquiring own shares	14	23	26	26	26	28	30	29
- Acquiring more than 1% of MV	5	13	17	11	13	14	18	18
Fraction of sample:								
- Seeking approval	*22%*	*83%*	*92%*	*82%*	*90%*	*95%*	*98%*	*93%*
- Acquiring own shares	*39%*	*64%*	*72%*	*67%*	*67%*	*70%*	*75%*	*73%*
- Acquiring more than 1% of MV	*14%*	*36%*	*47%*	*28%*	*33%*	*35%*	*45%*	*45%*
Buybacks / Approvals	***175%***	***77%***	***79%***	***81%***	***74%***	***74%***	***77%***	***78%***
Buybacks > 1% / Approvals	***63%***	***43%***	***52%***	***34%***	***37%***	***37%***	***46%***	***49%***
Companies in the sample	36	36	36	39	39	40	40	40

To determine more precisely the evolution of share buybacks since 1998, we have reconstituted the evolution of gross and net (net of shares sold or transferred) amounts spent on buybacks between September 1998 and December 2005. When amounts spent on buybacks were not available (i.e. before October 2004 reform), we have considered the buyback to be equally spread over the month, and have multiplied the number of shares acquired by the average share price over the month, which actually appears to be a satisfying proxy of the amounts spent (cross-checks have been performed on several companies). The result, showed in **Graph 1**, seems far from confirming a dramatic surge in amount spent on buybacks. On the contrary, we can see that buybacks have significantly increased in 2001, especially after September 11 attacks (French quoted companies have been granted a larger flexibility to buyback their own shares in that troubled context on stock markets), the amounts spent on buybacks have dramatically fallen back to much lower levels, around which they stay since then. In 2002, many firms have sold treasury shares they had bought in 2001. However, the two dramatic surges in amounts sold are mostly due to Vivendi Universal selling shares to reduce its indebtedness and then using treasury shares to pay for an acquisition (USA Networks). Although AMF Visas are essentially granted in the pre-AGM period, between March and May, one could also notice that actual share buybacks are executed over the whole year (except a slowdown in August, due to the weak trading activity on Paris Bourse), thus independently of the buyback approval date, which confirms the formal and optional characteristics of this authorization.

Graph 1: Amounts spent by sample companies between 1998 and 2005 (€bn)



If the acceleration in buybacks is not clear, their main characteristic is the concentration on a few large companies, which have represented the essential part of buybacks since year 2000. **Table 3** exhibits the ten largest gross amounts spent on share buybacks between years 2003 and 2005. Corresponding fractions of market capitalizations as of 3 January 2005 are showed to control for the companies' size. The result is very clear: on the €32.6bn spent on buybacks by the forty sample companies on that period, €25.6bn were spent by 10 companies (ranked by descending order: Total, BNP Paribas, Société Générale, L'Oreal, Danone, Dexia, Bouygues, Sanofi (before merger with Aventis), Vinci and Carrefour). Alone, Total S.A. spent €11.1bn on share buybacks between 2003 and 2005, thus representing 34% of amounts spent by CAC 40 companies. Taking into account net amounts spent instead of gross amounts, the proportions are not significantly changed, which confirms that buybacks are effectively concentrated on a few large companies, some of them having repurchased more than 10% of their market capitalization (as of 3 January 2005, our benchmark) between 2003 and 2005.

Table 3: Buybacks made by 2003-2005 "Top 10" repurchase companies between 2000 and 2005 (gross amounts spent, €m)

Company	2000	2001	2002	2003	2004	2005	2003-2005	% of MV as of 03/01/2005
Total	2 014	6 102	3 439	4 026	3 548	3 488	**11 062**	10,9%
BNP Paribas	1 144	144	475	1 061	1 785	690	**3 536**	7,4%
Société Générale	447	837	451	487	946	1 235	**2 669**	8,0%
L'Oreal	0	0	117	9	692	1 256	**1 957**	5,1%
Danone	80	970	801	383	228	685	**1 296**	7,0%
Dexia	0	0	128	130	508	594	**1 233**	6,4%
Bouygues	243	0	217	179	511	463	**1 152**	10,1%
Sanofi-Aventis	186	166	1 182	1 037	0	0	**1 037**	1,2%
Vinci	152	88	42	35	484	363	**883**	10,5%
Carrefour	0	0	0	121	567	86	**774**	3,1%
Top 10	**4 264**	**8 307**	**6 853**	**7 468**	**9 269**	**8 862**	**25 599**	
% of CAC 40	*40%*	*47%*	*71%*	*83%*	*79%*	*74%*	*78%*	
Sample (CAC 40)	**10 709**	**17 764**	**9 637**	**8 990**	**11 755**	**11 898**	**32 643**	

Appendix 2.a exhibits the gross amounts spent each year by all sample companies on share buybacks between September 1998 and December 2005 (restated with declarations published by the AMF), and **Appendix 2.b** the net amounts (net of shares sold or transferred) spent on buybacks over the same period. These two tables confirm the overwhelming domination of a few buybacks on all CAC 40 buybacks. As a first approach, we could remark that the largest buybacks have generally been performed by high cash flow generating

companies (Total, L'Oreal, Bouygues, Vinci…) or financial institutions (BNP Paribas, Société Générale, Dexia), which have been generating important historical results and cash flows over the last few years, and for which an efficient capital management policy is vital, since it is the heart of their business.

Finally, after showing the development of buybacks in value, and their concentration on a few large cash flow generating companies, we have examined the evolution of announced buyback objectives. French companies usually indicate several different possible objectives, if not all legal objectives, and generally do not exclude the cancellation of these repurchased shares, to leave all options open. However, they have to rank these objectives by priority, so that they can better reflect the management's intentions. The first buybacks, as showed by the AMF, were mainly aimed at stabilizing share prices (except exceptional buybacks due to the unwinding of cross-shareholdings). But the EU 2003 reform, applied in France since October 2004, should lead to a limitation of legal objectives, limited to capital reduction and the use of treasury shares as counterpart of derivative products (convertible bonds, employee incentive plans). To determine, whether there has been a shift in objectives given by companies on their documentation, we have examined the evolution of first-quoted objectives. **Table 4** shows a recent significant shift in main buyback objectives: although percentages were relatively stable between 2000 and 2004, with a large fraction of companies buying back shares to regulate share price fluctuations (whether caller share price stabilization/regulation, or liquidity management, or interventions according to market fluctuations, actually most often only to support their share price against negative trends, before the 2004 anti-market abuse reform), the percentage of buybacks primarily aimed at capital reduction has more than doubled in 2005, while the fraction of buybacks aimed at regulating the share price has been divided by two. This is primarily due to the reform of share buyback legislation, restricting the objectives for buybacks to the funding of employee incentive plans or convertible securities, or to capital reduction. At the same time, one could notice that buybacks justified by incentive plans and derivative products have less sharply increased, which may suggest a recent increase in real buybacks aimed at capital reduction, in excess of the direct impact of the change in regulation.

Table 4: Evolution of first-quoted objective of buyback programs authorized between 2000 and 2005

Main objective stated in the AMF filing	2000	2001	2002	2003	2004	2005
Employee incentive plans / Convertible securities	26%	26%	24%	21%	24%	39%
Capital reduction / Cancellation	17%	19%	21%	15%	16%	33%
Share price regulation / Buy and sell interventions / Liquidity management	48%	45%	45%	56%	51%	25%
External growth operations	9%	3%	3%	3%	3%	3%
Conservation	0%	6%	6%	6%	5%	0%
Number of available Visas	*23*	*31*	*33*	*34*	*37*	*36*

Thus, this statistical analysis of repurchases by CAC 40 companies (as in our sample) shows a contrasted development of buyback programs in France. If share buyback programs have known large media coverage over the last years, their increase in value is not straightforward, and above all it is strongly concentrated on a dozen of large cash flow generating companies and financial institutions. Most other companies announce their intention to seek AGM approval to initiate a buyback program, but this is mainly due to the legal obligation of double approval (both by the AGM and the AMF), and should be essentially considered as a simple option sought by managers to be able to manage their capital in a flexible way, rather than as a real buyback initiation. However, this precaution does not mean that buybacks are not developing in France, indeed we have seen they had become a privileged way for companies to distribute excess cash to shareholders without committing themselves by increasing cash dividend.

The strictness of buyback regulations has lead to a situation where almost all large companies seek AMF and AGM approvals each year, whether they intend to launch a buyback program or not. Simultaneously, they have no obligation to declare “ex-ante” that they intend to repurchase shares in a very near future; their obligation is an “ex-post” obligation to communicate and publish the transactions they have made on their own shares. Since the type of buyback announcements is different from the US and UK announcements, one should then expect a different impact on share prices: investors may not have the same interpretation in France than on Anglo-Saxon stock markets on the credibility of the announcement, and the intentions of the management. The purpose of the next section will be to determine and understand the impact of French buyback announcements on share prices, both on long-run performance and on short-term abnormal returns immediately following announcement of a buyback program.

5- Analysis on long-run performance of repurchase companies' share price

In order to determine the impact of share buybacks on share prices, we have first tried to establish a relation between stock price yearly changes and the percentage of shares repurchased during the year. We did not take into account eventual shares sold back on the market, in order to examine the relation between share price behavior and the intensity of a company's acquisitions of its own shares. We have both calculated arithmetic and weighted average, by weighting companies proportionally to their market value. We have separated our sample into two sub-samples, one gathering all companies having spent more than 1% of their initial market value (as of 01/01/2005) on repurchasing share, and the second one gathering all companies having spent less than 1% of their initial market value for their repurchases. The 1% threshold, although arbitrarily chosen, has seemed to be an adequate distinctive gap, in order to distinguish companies repurchasing their shares only marginally, and those making it more massively.

The result is quite seducing for the year 2005, showing a strong outperformance of shares of companies having executed massive buybacks. Considering weighted average returns, we obtain an average 29.1% increase when companies have massively repurchased their own shares, when shares of other companies only gain 16.8% (results detailed in **Appendix 3.a**). These results seem significant, since both sub-samples are of comparable sizes, and the largest market capitalizations do not deviate significantly from the sub-sample averages. However, the same experience lead on years 1998 to 2004 give more dispersed results (**Table 5**, cf. infra). Years 2001, 2002 and 2004 tend to confirm the results found for 2005, with average outperformance of the sub-sample of companies massively repurchasing shares, generally between 4% and 16%. But years 1998 to 2000 seems to contradict these results, showing a significant underperformance of companies conducting massive repurchases. 1998 results are not very relevant due to the low number of firms spending over 1% of their market value on repurchases (only 5 out of 33). We can also suggest that motivations for the first buybacks were often "exceptional" motivations, such as the unwinding of cross-shareholdings, and not economic financial management operations, thus inducing "non-traditional" stock price behaviors, out of the scope of corporate finance theories quoted in the first section of this study. But these three years show us that the impact of effective share repurchases has not always been a positive impact, and that we need to make further investigations, in order to determine the conditions, under which a share buyback can positively impact the evolution of the share price.

On the same dataset, we tried to test the correlation between the fraction of shares repurchased over the year and the share price evolution. We experienced a great disparities among the share price behaviors of companies not repurchasing shares, or repurchasing less than 1% of their market value, due to the fact that if stock repurchases can distinguish companies with good cash flow generation for instance, the absence of stock repurchases can correspond to many different situations, from the distressed company to the fast-growing company needing its cash reserves for profitable investments. Consequently, we have focused on sub-samples comprised only of companies having spent more than 1% of their market value on share repurchases, in order to go into more detail on the apparently positive correlation between effective stock repurchases and share price changes. The results of our statistical study on these sub-samples, showed in **Appendix 3.b**, confirm the positive correlation between the sizes of the fraction of market capitalization repurchased and share price changes over the year. But a regression analysis show us that even if 2004 data would suggest a good linear correlation between these variables, 2005 data show that no general and positive conclusion can be drawn from these two regressions, the two linear approximations of share price changes being far too different and not enough significant.

Table 5: Summary of empirical studies on the relation between the amounts spent on share repurchases and the share price evolutions (1998-2005)

Average Yearly Returns	1998	1999	2000	2001	2002	2003	2004	2005
Arithmetics means of companies:								
- Where repurchases > 1%	25,2%	48,9%	6,9%	-11,9%	-24,1%	14,9%	11,7%	25,0%
- Where repurchases < 1%	38,3%	77,0%	9,7%	-18,9%	-30,1%	26,2%	6,5%	19,4%
Outperformance	**-13,1%**	**-28,1%**	**-2,9%**	**7,0%**	**6,0%**	**-11,3%**	**5,2%**	**5,6%**
Weighted means of companies:								
- Where repurchases > 1%	14,1%	39,9%	-5,7%	-18,0%	-21,8%	14,4%	5,4%	29,1%
- Where repurchases < 1%	44,3%	66,5%	8,6%	-23,4%	-40,4%	18,8%	5,9%	16,8%
Outperformance	**-30,3%**	**-26,6%**	**-14,4%**	**5,4%**	**18,6%**	**-4,4%**	**-0,5%**	**12,3%**
Number of companies:								
- Where repurchases > 1%	5	13	17	11	13	14	18	18
- Where repurchases < 1%	29	21	20	28	27	26	22	22
Total	**34**	**34**	**37**	**39**	**40**	**40**	**40**	**40**

As a conclusion on this first empirical study, we have seen that a positive correlation often exists between the importance of effective buybacks made by firms of the sample and the evolution of their share price. Not considering the years 1998 to 2000, when share buybacks were still exceptional and due to special considerations such as unwinding cross-shareholdings, we find an outperformance of stocks being significantly (over 1%) repurchased, and a positive correlation between the stock price evolution and the fraction of shares actually repurchased during the year. But this positive correlation cannot be simply explained by a linear model, linking both variables, and needs to be further investigated, to get a better understanding of it. All the more as this correlation could also be explained differently, since both variables could result from a common cause, a good cash flow generation by the company.

In the following section, we need to determine if other factors can explain the differences in share price behaviors. To determine more precisely if this positive correlation can be a causal relation, with buybacks leading to share price increases, we will now focus on an analysis of abnormal returns following buyback announcements, which should allow us to test the immediate market reaction to buyback announcements, and to estimate the fraction of price changes that is due to share buybacks.

6- Event study: abnormal returns following open market share buyback announcements (1998-2006)

a. Methodology

Since long-run share price performance can be affected by many factors, including the buyback, but also by results publications, takeover threats or varied rumors, they are a good indicator of the financial wealth and the earnings prospects of a company, of the market confidence in its future cash flow generation, but are not sufficiently focused to determine and analyze the direct impact of share buyback. As we have seen in **Section 2**, economic research papers investigating the impact of buybacks on shareholders' value have mainly focused on Cumulative Abnormal Returns on an event window of several days surrounding the buyback announcement. By that approach, GINGLINGER and L'HER (2002) have experienced an average 0.57% abnormal return in the [-1;+1] event window, which is low compared to the average of 3% found in the US, or even 6% found in Germany. Considering the publication dates of AMF Visas and other announcements directly made by managers, they have concluded that this abnormal return was highly dependent on the company's size, which is generally negatively correlated with the informative content of buyback announcements, and also on ownership control, the reaction being less positive for family-controlled firms, where the reinforcement of the family's control is generally negatively perceived, in the absence of an increase in the family's wealth at risk.

In this final section, we examined the impact of share buyback announcements by companies with large market capitalizations, in order to see if this abnormal return could be confirmed on the largest companies, and to determine which factors can affect the market reaction to a buyback announcement, given the French buyback regulation. For that purpose, we have collected all buyback announcements found in all international news articles (including general and economic newspapers, specialized news agencies (Reuters)…) between September 1998 and April 2006, by doing an extensive research on each company of the sample on the database Factiva, searching all keywords used to announce buybacks ("buyback", "repurchase", "rachat(s) d'actions"…). Excluding legal declarations of actual transactions on own shares, we have found 111 buyback announcements. This number is not comparable with the number of Visas actually granted by the AMF over the period (194 Visas obtained by sample companies), and only includes announcements made in the different media. We have not included all publication dates of AMF Visas, considering that it was not relevant to study abnormal return following an announcement, on which the company did not have communicated at all. Indeed, it seemed that AMF Visas not announced in the press were the most likely to be purely “formal” filings, and should not be considered as buyback announcements. We have preferred to take the risk of being too restrictive and to miss some data, in order to have a better sample quality. For each buyback announcement, we have carefully determined the first date on which the buyback was announced, which we have considered as the announcement date. In order to be able to discriminate between the different buyback announcements, we have also considered the way the announcement was made (results announcement, AMF filing publication, strategic plan…), to see if abnormal returns are pure or can be mixed with reactions to simultaneous announcements.

Abnormal returns are calculated as the difference between actual return and a theoretical return estimated with a CAPM model.

Actual return $R_{i,t}$ (return on asset i, on day t) is given by the formula: $R_{i,t} = \ln\left(\frac{P_{i,t}}{P_{i,t-1}}\right)$.

In the CAPM model, theoretical return $R^*_{i,t}$ (“normal” return) is given by: $R^*_{i,t} = \alpha_i + \beta_i \times R_{m,t} + \varepsilon_{i,t}$, where $R_{m,t}$ is the market return on day t (in that case the French CAC 40 Index), $E(\varepsilon_{i,t}) = 0$, and the parameters α_i and β_i are determined by doing a linear regression between $R_{i,t}$ and $R_{m,t}$ over a certain period of time. In order to have sufficiently reliable parameters, we have considered a 3-month period starting six months before each buyback announcement, so that the parameters reflect a recent state of the company, without being disturbed by results or buyback announcements (since most announcements are made between results announcement and the AGM, starting six month before allowed us to avoid most of the results announcements, either by the firm or by other firms included in the index, thus making regressions more reliable).

Thus, we have estimated abnormal returns $R_{i,t}$ by the formula:

$$AR_{i,t} = R_{i,t} - R^*_{i,t} = \ln\left(\frac{P_{i,t}}{P_{i,t-1}}\right) - \left(\alpha_i + \beta_i \times \ln\left(\frac{P_{m,t}}{P_{m,t-1}}\right)\right)$$

Finally, we have calculated cumulative abnormal returns on several different event windows: on announcement date (noted [0]) and between the day before announcement and i days after (noted [-1;+i], with i lower than 5), to determine the immediate share price reaction and the share price behavior on the following days.

b. Empirical results on abnormal returns

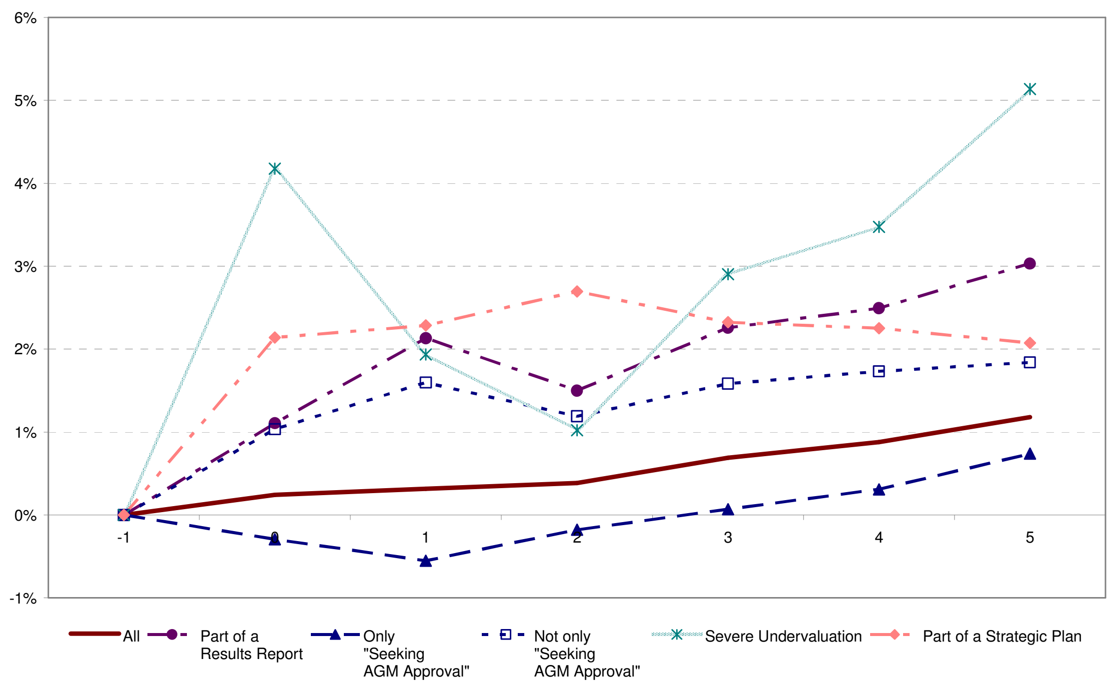
Applying the previously methodology to our sample of 111 buyback announcements, we have found an **average abnormal return of only 0.32%** on a [-1;+1] event window, which is the most commonly studied period. Using a [-1;+2] event window, we only get a 0.39% abnormal return, while this abnormal return reaches 1.18% on a [-1;+5] period. This abnormal return is weak, compared to other countries, but confirms what GINGLINGER and L'HER had found in 2002, on a shorter period of time but a broader company spectrum (all French quoted companies). This tends to confirm the general lack of credibility of buyback announcements in France, since investors very often have no way to know if the announcement (generally a company seeking AGM approval and communicating on its AMF filing) will be followed by effective repurchases or if it is only a legal, formal authorization request, which does not really announce a genuine buyback. Announcement credibility has also been questioned in the US, but most economists argue that since American companies do not need any AGM or SEC approval, but only a public announcement made by the Board of a buyback in the near future, the number of buyback announcements should be far lower than the number of AMF Visas publications in France. These announcements should thus be made only when a company actually considers buying back its own shares, and not every year as a common option. As a consequence, even if they are not firm commitment to repurchase shares, US announcements can be considered as more credible than French ones, since the cost (reputation cost) of non repurchasing its own shares would be more costly (since a company would have no obligation to communicate on the possibility to launch a buyback before actually considering the initiation of the program, a company producing a misleading buyback announcement would be accused of abusing investors' confidence). Thus the question of the credibility of buyback announcements, introduced by IKENBERRY, LAKONISHOK and VERMAELEN (1995) to account for market underreaction to open market share repurchases, seems even more crucial in France, where the very low average short-term reaction can be explained by the lack of visibility of investors on the effectiveness of the buybacks, and the intentions of the management.

To go into more details, the low abnormal return we have found puts together very heterogeneous figures, highly depending on the context of their announcement. We have thus tried to “clean” these 111 announcements, by distinguishing announcements by companies that they will seek AGM approvals (or AMF filings), announcements made during results announcements and therefore troubled by the reaction to the announced results (no general conclusion can be drawn from these announcements, since buybacks can be announced with good results and cash flows as well as to distract investors’ attention from disappointing results), or buybacks announced separately, following particularly severe fall in share price, and announcements made as part of an important strategic plan. **Table 6** and **Graph 2** summarize the results of our study, and confirm that, if abnormal return is generally positive after buyback announcements, the reaction is far less important when companies just announce their intention to seek AGM approval for a buyback program, and far more important when the buyback announcement follows a severe fall of the share price, resulting in a severe undervaluation of the stock. This supports the lack of credibility of announcements through AMF filings, and validates the undervaluation signaling theory. The impact is less obvious in cases where the buyback has been announced during a results publication, or as part of a strategic plan, since investors react to a bundle of different news, which can affect the share price simultaneously or adversely.

Table 6: Cumulative abnormal returns following buyback announcements, by context of announcement

	All	Part of a Results Report	Only "Seeking AGM Approval"	Not only "Seeking AGM Approval"	Severe Undervaluation	Part of a Strategic Plan
CAR [0]	**0,24%**	**1,11%**	**-0,29%**	**1,03%**	**4,18%**	**2,14%**
CAR [-1;+1]	**0,32%**	**2,13%**	**-0,55%**	**1,60%**	**1,93%**	**2,28%**
CAR [-1;+2]	0,39%	1,50%	-0,18%	1,19%	1,02%	2,70%
CAR [-1;+3]	0,69%	2,26%	0,07%	1,58%	2,90%	2,32%
CAR [-1;+4]	0,88%	2,49%	0,31%	1,73%	3,47%	2,25%
CAR [-1;+5]	1,18%	3,03%	0,74%	1,84%	5,14%	2,08%
Number of Announcements	111	16	67	44	3	4

Graph 2: Cumulative abnormal returns following buyback announcements, by context of announcement, over the five trading days after announcement

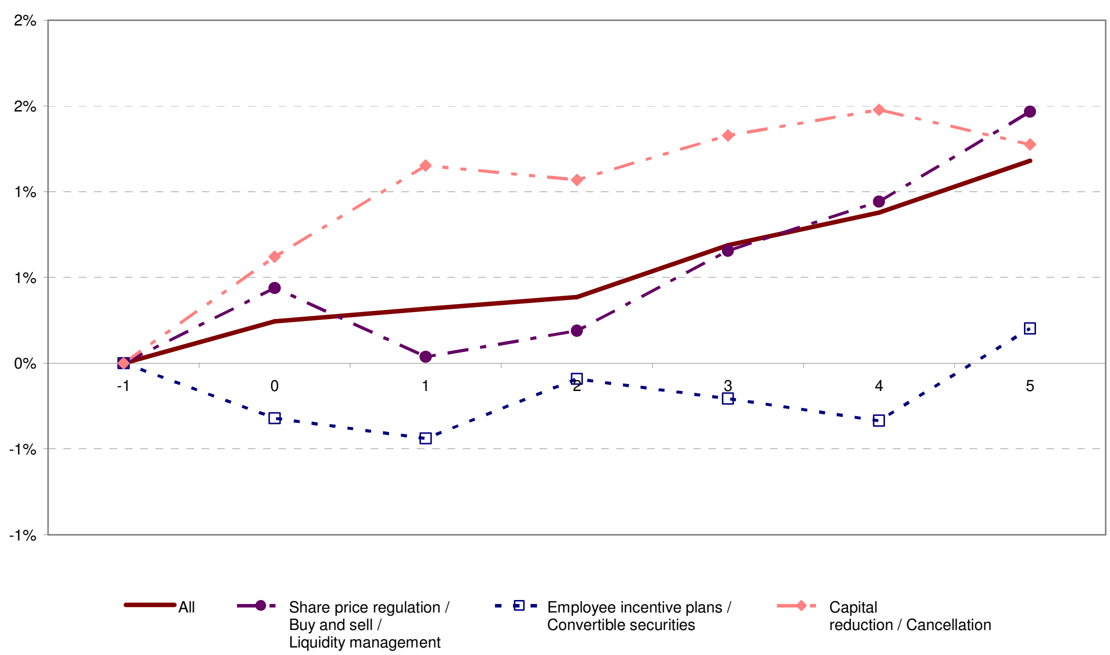


Finally, we have tried to determine the effect of announced objectives on market reaction to buyback announcements. On the basis of our 111-announcement sample, we have discriminated announcements following the main objective quoted for the buyback, as determined in **Section 4.b**. **Table 7** and **Graph 3** summarize the results of this analysis. We did not represent results on buybacks for "External growth operations" as well as "Conservation of treasury shares", which were not meaningful, due to an insufficient number of cases in our sample. Despite the weak reactions due to the low likelihood and the delay of share buyback announcements, our sample tends to prove that investors generally positively welcome buybacks aimed at reducing capital, since these buybacks induce a recurrent EPS accretion, thus generally resulting in a rise in the share price, and convey a positive message on both the ability of the firm to generate important cash flow and the alignment of managers with shareholders' interests, as managers show their commitment to shareholder's value creation, instead of investing in value-destroying projects. Buybacks aimed at stabilizing the share price and reducing fluctuations are also positively welcome, although with a lower market reaction. Since they are most often used to support the company's share price, especially in troubled period, it is not surprising to see a small positive impact on the share price after their announcement. On the contrary, buybacks aimed at the funding of convertible securities or employee incentive plans do not exhibit such a positive market reaction. This reaction even seems to be negative over the first days: maybe is it the sign that investors were expecting other uses of shares repurchased, since the repurchase of shares as counterpart of derivatives or for employee incentive plans does not directly create shareholders' value. However, this hypothesis cannot be confirmed by our sample alone, and would need to be investigated into more detail.

Table 7: Cumulative abnormal returns following buyback announcements, by first-quoted objective

	All	Share price regulation / Buy and sell / Liquidity management	Employee incentive plans / Convertible securities	Capital reduction / Cancellation
CAR [0]	**0,24%**	**0,44%**	**-0,32%**	**0,62%**
CAR [-1;+1]	**0,32%**	**0,04%**	**-0,44%**	**1,15%**
CAR [-1;+2]	0,39%	0,19%	-0,09%	1,07%
CAR [-1;+3]	0,69%	0,66%	-0,21%	1,33%
CAR [-1;+4]	0,88%	0,94%	-0,34%	1,48%
CAR [-1;+5]	1,18%	1,47%	0,20%	1,28%
Number of Announcements	111	37	28	43

Graph 3: Cumulative abnormal returns following buyback announcements, by first-quoted objective, over the five trading days after announcement



c. Case studies: adverse market reactions following buyback announcements

As we have found in the previous section, our statistical analysis puts together a quite large number of varied situations, often resulting in very different market reactions. If average market reaction is generally slightly positive, particular situations can contradict the statistical evidence, and be also partially responsible for the mitigated market reaction experienced. To illustrate this purpose, we have selected and studied a few cases, which tend to suggest that the market participants are able to make distinctions between buyback announcements, depending on the announced or real objective of the buyback, but also on the general context of the company.

The cosmetics giant L'Oreal has announced a €1000m buyback program in June 2004. Despite a few brokers arguing that this was an indicator of a lack of earnings prospects, this announcement was generally positively welcome, with a positive abnormal return (we found CAR [-1;+5] = 3.3%), considering the decision was "in line with a general policy of good financial management in view of the cash flow generated by L'Oreal", as argued by the management, since the company had a very low debt and important cash flows. The extension of this buyback program in February 2005 has also been positively welcome (CAR [-1;+5] = 3.2%), for the same reasons. However, the new buyback program announced in June 2005 has been generally negatively welcome (CAR [-1;+5] = -1.1%). Indeed, most brokers have considered the buyback was the sign of a slowdown in the company's earnings growth. Several have argued that the buyback was only aimed at hiding this slowdown and allowing the CEO, Lindsay Owen-Jones, to leave on a 20^{th} year of double-digit growth, but only thanks to the publication of EPS growth figures, mechanically boosted by share buybacks, instead of the previously published Profit Before Tax. This buyback has thus been perceived as a pure financial communication play, aimed at hiding the degradation of the company's earnings prospects and its lack of profitable investment opportunities (the 10% EPS growth being only possible thanks to a reduction of advertising budgets and a 2-3% mechanical accretion due to share buybacks). This emphasizes the fact that if buybacks are appreciated by shareholders to distribute excess cash instead of investing in value-destroying projects, they are also a signal of the lack of profitable opportunities, and can therefore disappoint shareholders, if they feel that the company is lacking prospects.

Intensive buybacks launched by Peugeot have also induced varied market reactions following their announcement. Their first buyback program, announced in March 1999, allowed an accretion of the Peugeot family's control in the company, but was officially aimed at improving the return on capital employed and create shareholders' value, the share price being considered as significantly undervalued by the management. This buyback was very positively welcome by the market, with a 6.0% CAR [-1;+5], thus supporting both cash surplus and undervaluation signaling theories. However, despite the same objectives being given by the management, the buyback announced in April 2001 has been very differently perceived by the market (CAR [-1;+5] = -2.6%). The reason for this is the negative perception of the mechanical accretion of the family's control over the company. The Peugeot example illustrates that, whereas the acquisition of shares by a reference (minority) shareholder is generally understood as a signal of confidence in the company's ability to generate cash flows in the future, the passive accretion of this reference shareholder induced by share buyback induces the inverse effect, since the shareholder increases its control over the company (since treasury shares and cancelled shares do not bear any voting right) without increasing its wealth at risk, or exposition to future cash flows. Furthermore, in May 2005, shareholders have criticized the decision to repurchase shares and leave the cash dividend unchanged for the second consecutive year. In this situation, where we can see again that dividends and share repurchases are not equivalent, shareholders would have preferred more tangible cash dividends, rather than a steady reinforcement of the founding family's control. This buyback, negatively received (CAR [-1;+5] = -3.1%), confirms that it is difficult to draw general conclusions on the opportunity to decide share repurchases, since the market reaction can change radically from one year to another, on the same company.

Finally, even among the largest cash flow generating companies, such as Total, or BNP Paribas, share buybacks can have their limit. Total has been communicating for several years on both its cash dividend payout ratio and on the amount it would spent on share buybacks. As a result, Total's buybacks are now expected, and fulfill the same role as dividends, with equivalent obligations: always returning important amount of cash, Total is "committed" to continue its buyback over the next year. Following BNL's recent acquisition, BNP Paribas, also among the largest repurchase companies, has declared they would slow down their buyback program, in order to be able to better digest this important acquisition. The negative reception of this signal by disappointed investors, despite the justified explanations given by BNP Paribas management, shows that it is not obvious for large repurchase companies that they avoid committing themselves by repurchasing shares rather than increasing cash dividend. This feature of buyback may be true for exceptional buybacks, but not for regular programs, which come as a natural and expected complement of cash dividends, more tax-advantageous for the investor, but progressively priced in the company's share price.

We can infer from these case studies an important result on share buyback announcements: beyond the average positive abnormal return experienced following buyback announcements, significant adverse market reactions are also observed. Market participants are indeed able to make distinctions between buyback announcements, depending on their announced or real objective, and on the general context of the company (lack of growth prospects, increase in control by a reference shareholder without increasing wealth at risk…), and beyond the strictly mechanical accretive effect of the operation. EPS accretion and shareholders' value creation are thus considered as two separate concepts, and the market reaction does not reflect the mechanical accretive effect of the operation, but rather the beliefs of the market participants on the intentions of managers and controlling shareholders, as well as on the value creation prospects of the company.

Conclusion

After a late authorization, share buybacks have become a common practice for French companies, which have rapidly been more active on trading on their own shares. The positive correlation between the relative amount spent on share buyback programs and the long-run share price performance tends to suggest a positive impact of buybacks on shareholders' value, in conformity with good financial management and corporate governance principles.

However, due to strict approval requirements and disclosure obligations, the immediate effect of share buyback announcements seems far less obviously sizeable than in other countries, such as the United States or Germany. As we have seen, the limited abnormal return following buyback announcements is certainly due to the difficulty for shareholders to determine the likelihood of the buyback, and its extent, if it is effectively executed, since mandatory AMF filings for buyback authorizations are quasi-universal and only provide companies with an option to repurchase shares, and do not constitute any commitment to do so. Share repurchases aimed at capital reduction show in average the largest abnormal return following announcement, and tend to confirm the cash surplus hypothesis: they are the most likely inspired by good corporate governance and shareholders' value creation principles. Repurchases executed to limit the share price fluctuations also experienced positive abnormal returns, probably because they were actually most often used to support the share price in bearish markets. However, their impact should progressively disappear, since they will now have to be executed by an independent intermediary, to prevent market abuses.

Finally, although buybacks are generally a signal of a good financial policy, we have experienced important differences between market reactions to their announcements, even from the same company. An important result we have showed is that the market seems to be able to make distinctions between buyback announcements, relying on its understanding of their objectives and context, and thus beyond the mechanically accretive effect of the operation, sometimes leading to an adverse reaction when the buyback does not seem to be aimed at shareholders' value creation. We have also seen that, to be positively interpreted, a buyback program has to be proportionate, reasonable, and accompanied by confident statements on planned investments, value-adding projects and future earnings and cash flow generation, so that the market does not fear that the buyback may be a signal of a lack of earnings prospects, trying to dissimulate difficulties to develop new profitable projects.

Appendices

Appendix 1	**Summary table for open market repurchase regulations of the ten largest stock markets**	**51**
Appendix 2	**Amount spent on share buybacks by sample companies between 1998 and 2005**	**52**
	- **Gross amount**	
	- **Net of shares sold or transferred**	
Appendix 3	**Empirical study of the relation between the amounts spent on share repurchases and the share price evolutions**	**54**
	- **Detailed data for the year 2005**	
	- **Correlation analysis between the size of the fraction of market value spent on share repurchases and stock price changes over the year**	
References		**57**

Appendix 1: Summary table for open market repurchase regulations of the ten largest stock markets

This table summarizes regulatory provisions on open market share repurchases for each of the ten countries. They are, from the largest stock market capitalization, the U.S., Japan, the U.K., France, Germany, Canada, Italy, the Netherlands (NL), Switzerland (SL), and Hong Kong (H.K.). In the box below, each column with respect to the implementation of an open market share repurchase program. A (share) repurchase means an open market share repurchase. EA stands for an annual earnings announcement.

Approval	Whether a board approval is sufficient or an approval from the shareholder meeting is required.
Timing Restriction	Whether there are any restrictions on the timing of share repurchase: e.g. repurchase trading is prohibited for the last 30 minutes of a trading day; repurchase should be done in a 12-month period after authorization.
Price Restriction	Whether there are any restrictions on the price of share repurchase: e.g. repurchase transactions cannot be made at a price higher than the most recent closing price.
Volume Restriction	Whether there are any restrictions on the number of shares to be repurchased: e.g. the maximum number of shares to be repurchased cannot exceed 10 % of the total outstanding shares.
Separate Disclosure	Other than a disclosure in a financial statement, whether there are any separate, additional disclosure requirements: e.g. a detailed repurchase report has to be filed with the authority of the stock exchange.
Insider Trading	Whether there are any trading restrictions or disclosure requirements on insiders in a period when a repurchase program is underway.
Major Reporting Authority	What organization is the major authority that a repurchase firm has to report to; what is the main supervisory authority regulating share repurchase.
Other Issues	Whether there are any other related issues: e.g. there is a significant tax disadvantage for open market share repurchases.

	Approval	Timing Restriction	Price Restriction	Volume Restriction	Separate Disclosure	Insider Trading	Major (Reporting) Authority	Other Issues
US	Board	None	None	None	None	None	SEC	10-Q, 10-K disclosure as of 2004
Japan	Board	Last 30 min, week before year end	No higher than last day price	25 % of daily volume	Daily	Yes	Tokyo Stock Exchange	
UK	Shareholder meeting	18 mo limit	No higher than 5 % of 5 day price	15 % of total shares	Daily	Yes	FSA (Financial Supervisory Authority)	EU Nation
France	Shareholder meeting	18 mo limit, 15 days before EA	No higher than daily high	10 % of total shares, 25 % of daily volume	Monthly	Yes	COB (Comm. on Securities Trading)	EU Nation
Germany	Shareholder meeting	18 mo limit	Shareholder meeting: max and min	10 % of total shares	Some ad-hoc, 5%-10% hurdles	None	BaFin (Financial Supervisory Authority)	EU Nation
Canada	Board	12 mo limit	No higher than most recent price	5 % of total shares, 10% public float	Monthly	Yes	Toronto Stock Exchange	TSE listed firms only
Italy	Shareholder meeting	18 mo limit	No higher than most recent price	10 % of total shares, 25 % of monthly volume	Yes (treated as public offers)		CONSOB (Comm. on Financial Markets)	EU Nation
NL	Shareholder meeting	18 mo limit	Shareholder meeting: max and min	10 % of total shares	Daily	Yes	Authority FM (FM: Financial Market)	EU Nation
SL	Shareholder meeting	10 days before EA	No higher than 5 % of the current market price	10 % of total shares, 25 % of monthly volume	Second Trading Line	Yes	Swiss Takeover Board (TOB)	Tax
HK	Shareholder meeting	12 mo limit, 1 mo before EA	None	10 % of total shares, 25% monthly volume	Daily	Yes	HK Stock Exchange	

Source: KIM, SCHREMPER and VARAIYA (2004) "Open market share repurchase regulations: a cross-country examination", San Diego State University

Appendix 2.a: Amount spent on share buybacks by sample companies between 1998 and 2005 (gross amount)

Company	2000	2001	2002	2003	2004	2005
Accor	2	10	0	0	0	0
AGF	501	73	48	0	28	158
Air Liquide	78	155	79	139	44	61
Alcatel	20	20	0	0	0	0
Arcelor	108	0	0	0	22	116
AXA	0	0	0	0	0	546
BNP Paribas	1 144	144	475	1 061	1 785	690
Bouygues	243	0	217	179	511	463
Cap Gemini	1	0	0	0	0	14
Carrefour	0	0	0	121	567	86
Casino	0	209	151	243	0	55
Crédit Agricole	0	0	0	27	564	0
Danone	80	970	801	383	228	685
Dexia	0	0	128	130	508	594
EADS	0	0	156	21	0	168
Essilor	0	0	0	8	53	119
France Telecom	1 766	3 585	25	0	1	0
L'Oreal	0	0	117	9	692	1 256
Lafarge	0	0	1	41	0	0
Lagardère	22	166	0	0	27	56
LVMH	544	189	15	195	312	254
Michelin	45	16	0	0	20	0
Pernod-Ricard	76	0	4	45	61	0
Peugeot	259	476	562	190	273	198
PPR	710	179	318	134	100	212
Publicis	0	0	124	7	13	19
Renault	0	93	90	92	0	0
Saint Gobain	375	39	172	185	279	210
Sanofi-Aventis	186	166	1 182	1 037	0	0
Schneider Electric	170	81	316	119	286	161
Société Générale	447	837	451	487	946	1 235
STMicroelectronics	0	0	0	0	0	0
Suez	476	196	158	18	6	99
TF1	0	7	0	0	12	39
Thales	0	381	0	0	1	24
Thomson	120	33	0	54	78	292
Total	2 014	6 102	3 439	4 026	3 548	3 488
Veolia Environnement	75	152	128	4	203	0
Vinci	152	88	42	35	484	363
Vivendi	1 097	3 399	436	0	102	237
Total (CAC 40)	**10 709**	**17 764**	**9 637**	**8 990**	**11 755**	**11 898**

Appendix 2.b: Amount spent on share buybacks by sample companies between 1998 and 2005 (net of shares sold or transferred)

Company	2000	2001	2002	2003	2004	2005
Accor	-17	10	0	-128	0	0
AGF	313	-25	-15	-34	-27	-95
Air Liquide	78	148	79	139	44	-71
Alcatel	20	-103	-88	0	0	0
Arcelor	108	-262	0	0	-374	-141
AXA	0	0	0	0	0	387
BNP Paribas	1 105	52	358	818	-474	498
Bouygues	-42	0	217	126	412	334
Cap Gemini	0	0	0	0	0	1
Carrefour	0	0	0	121	441	-316
Casino	-60	-31	75	67	-117	-157
Crédit Agricole	0	0	0	27	557	-50
Danone	80	970	801	383	228	679
Dexia	0	0	128	69	507	590
EADS	0	0	156	21	0	168
Essilor	0	0	0	8	48	46
France Telecom	1 766	3 585	25	0	1	0
L'Oreal	0	0	117	-102	663	1 162
Lafarge	0	0	0	36	-2	-4
Lagardère	-50	166	0	0	26	33
LVMH	487	-387	-744	-170	153	-44
Michelin	45	5	-125	-25	-6	0
Pernod-Ricard	68	-130	0	45	55	0
Peugeot	259	455	559	190	268	193
PPR	396	-104	218	33	-126	-194
Publicis	0	0	123	7	9	-5
Renault	0	93	90	92	0	0
Saint Gobain	375	29	169	176	233	124
Sanofi-Aventis	173	146	1 146	1 006	-492	-57
Schneider Electric	161	81	314	117	280	47
Société Générale	419	-197	248	328	608	387
STMicroelectronics	0	0	0	0	0	0
Suez	271	41	157	1	-19	27
TF1	0	7	-3	0	-5	39
Thales	0	381	-44	0	-102	-117
Thomson	120	-71	0	54	76	242
Total	2 014	6 102	3 439	4 026	3 548	3 488
Veolia Environnement	39	143	120	1	171	-7
Vinci	152	86	22	32	300	260
Vivendi	1 038	2 434	-3 761	0	20	-543
Total (CAC 40)	**9 318**	**13 625**	**3 780**	**7 462**	**6 902**	**6 904**

Appendix 3: Empirical study of the relation between the amounts spent on share repurchases and the share price evolutions

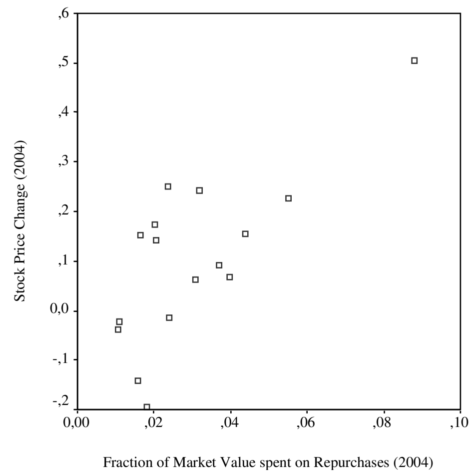
a. Detailed data for the year 2005

Company	Market Value (MV, €m) on 01/01/2005	Share Price Change (%) in 2005	% of MV Spent on Repurchases in 2005	Relative Weight in 2005
Total	101 609	32,0%	3,4%	12,4%
Sanofi-Aventis	83 696	25,9%	0,0%	10,2%
France Telecom	60 568	-13,5%	0,0%	7,4%
BNP Paribas	47 508	28,2%	1,5%	5,8%
L'Oreal	38 164	12,4%	3,3%	4,6%
AXA	35 114	49,9%	1,6%	4,3%
Société Générale	33 204	39,6%	3,7%	4,0%
Crédit Agricole	32 933	19,9%	0,0%	4,0%
LVMH	27 730	33,2%	0,9%	3,4%
Vivendi	25 908	12,6%	0,9%	3,2%
Carrefour	25 323	13,0%	0,4%	3,1%
Suez	20 079	36,1%	0,5%	2,4%
Dexia	19 406	15,1%	3,1%	2,4%
Danone	18 499	29,9%	3,8%	2,2%
Renault	17 837	11,9%	0,0%	2,2%
EADS	17 454	49,1%	1,0%	2,1%
Saint Gobain	15 449	13,4%	1,4%	1,9%
Alcatel	15 158	-8,6%	0,0%	1,8%
Air Liquide	14 903	19,5%	0,4%	1,8%
STMicroelectronics	12 940	5,7%	0,0%	1,6%
Lafarge	12 430	7,0%	0,0%	1,5%
Schneider Electric	12 103	47,2%	1,3%	1,5%
Bouygues	11 440	21,5%	4,1%	1,4%
Arcelor	11 017	23,5%	1,1%	1,3%
Veolia Environnement	10 892	43,6%	0,0%	1,3%
AGF	10 498	52,3%	1,5%	1,3%
PPR	9 079	29,2%	2,4%	1,1%
Vinci	8 385	47,1%	4,4%	1,0%
Pernod-Ricard	7 979	30,8%	0,0%	1,0%
Peugeot	7 979	4,3%	2,5%	1,0%
Lagardère	7 516	22,4%	0,7%	0,9%
Michelin	6 888	0,6%	0,0%	0,8%
Accor	6 455	44,2%	0,0%	0,8%
Thales	6 101	8,4%	0,4%	0,7%
Essilor	5 881	18,3%	2,0%	0,7%
Casino	5 641	-4,3%	1,0%	0,7%
Thomson	5 411	-9,0%	5,5%	0,7%
TF1	5 212	-2,1%	0,8%	0,6%
Publicis	4 697	23,3%	0,4%	0,6%
Cap Gemini	3 165	43,9%	0,4%	0,4%
Max	**101 609**	**52,3%**	**5,5%**	**0,12**
Mean	**20 556**	**22,7%**	**1,5%**	**0,03**
Min	**3 165**	**-13,5%**	**0,0%**	**0,00**

Arithmetics means of companies:	
- Where repurchases > 1%	**25,0%**
- Where repurchases < 1%	**19,4%**
Weighted means of companies:	
- Where repurchases > 1%	**29,1%**
- Where repurchases < 1%	**16,8%**
Number of companies where repurchases > 1%	18
Number of companies where repurchases < 1%	22

b. Correlation analysis between the size of the fraction of market value spent on share repurchases and stock price changes over the year

- **Year 2004:**



Focusing on the 2004 sub-sample of companies having effectively spent over 1% of their market value on share repurchases, we have removed Essilor from our sample, with a share price change of 40.6% with only 1.3% of its market value spent on share repurchases, which constituted an abnormal point, making a regression less representative. The result of this regression shows that the change in share price can be approximated through the linear equation:

% Share Price Change = 6.341 * Fraction repurchased – 8.9%

Although the constant term does not seem very representative, the slope of the curve is quite clear, with a t-statistic at 4.114 (and thus a very satisfying confidence level). However, the R², at 0.547, is satisfying but not absolutely convincing.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,740(a)	,547	,515	.117957254

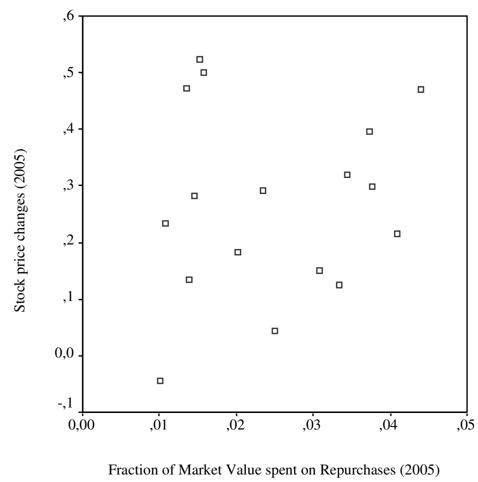
a Predictors: (Constant), BUYBACK

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-,089	,055		-1,614	,129
	BUYBACK	6,341	1,541	,740	4,114	,001

a Dependent Variable: RETURN

- **Year 2005:**



Now focusing on the 2005 sub-sample of companies having effectively spent over 1% of their market value on share repurchases, we have removed Thomson from our sample, despite of strong stock repurchases (5.5%), considering its share price underperformance (down 9%) was due to exceptional difficulties. The result of this regression shows that the change in share price can be approximated through the linear equation:

% Share Price Change = 1.615 * Fraction repurchased + 23.0%

But this regression seems far less reliable than the regression found for 2004, as showed by the t-statistics (t-statistic at 0.440 for the slope, considered as not meaningful) and the R^2, only at 0.013, which show that we cannot rely on this approximation. Furthermore, the equation obtained for 2005 is far different from the one obtained in 2004, thus making it impossible to draw any positive conclusion from these two regressions.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,113(a)	,013	-,053	.168820888

a Predictors: (Constant), BUYBACK

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,230	,100		2,312	,035
	BUYBACK	1,615	3,667	,113	,440	,666

a Dependent Variable: RETURN

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- **Internet:**

www.amf-france.org, "Autorité des Marchés Financiers", French independent public authority regulating and overseeing the financial markets, for buyback regulations and effective share repurchases announcements ("Transactions on own shares")

Corporate websites of sample companies (CAC 40 constituents, as of January 2005), for press releases and financial reports (Annual reports, interim reports, 20-F forms…)

www.vernimmen.net, academic website of the "Vernimmen" Corporate Finance book

- **Databases:**

Factiva (www.factiva.com), news articles, for buyback announcements and comments from the press and brokers

Datastream, for all stock exchange data since 1998 (including share prices, volume traded, financial accounts…)

Thomson Research, for brokers' reports

Econlit, for economic research publications from the American Economic Associations's Journal of Economic Literature

Business Source Complete, for economic research publications from international economic reviews

Social Science Research Network (SSRN), for economic research working papers

- **Statistical Analysis:**

S.P.S.S., version 11.5, software dedicated to statistical analysis (regressions, multivariate analysis…)