european corporate governance institute

L-Shares: Rewarding Long-Term Investors

Finance Working Paper N° 342/2013
November 2012

Patrick Bolton
Columbia University and ECGI
Frédéric Samama
SWF Research Initiative and Amundi – Crédit Agricole Group

© Patrick Bolton and Frédéric Samama 2012. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.

This paper can be downloaded without charge from:
https://doi.org/10.67929/ecgi-fin-342-2013

european corporate governance institute

ECGI Working Paper Series in Finance

L-Shares: Rewarding Long-Term Investors

Working Paper N° 342/2013
November 2012

Patrick Bolton
Frédéric Samama

© Patrick Bolton and Frédéric Samama 2012. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.

Abstract

We argue that a fundamental reason for the short term perspective of corporate executives is the short-term orientation of shareholders and financial markets that drive the performance benchmarks of CEOs. In our view, long-term committed shareholders can provide substantial benefits to the company they invest in and although some shareholders are prepared to take a more long-term view, they are generally not rewarded for their loyalty to the company. We believe that because they are a scarce resource and provide benefits to the company and other shareholders that have all the features of a public good, long-term shareholders need to receive financial incentives. While lengthening stock option vesting periods and introducing claw-back provisions into CEO compensation contracts help induce a more long-term orientation of CEOs, we argue that it is also necessary to reinforce this more long-term performance-based compensation with a better alignment between shareholders and CEOs horizons. Our proposal for moving towards such an alignment is to introduce Loyalty-Shares (or L-shares). These shares provide an additional reward (usually under the form of an extra-share or extra-dividend) to shareholders if they have held on to their shares for a contractually specified period of time, the loyalty period. The reward we propose, which we believe would be a more optimal solution in many cases, is in the form of a warrant giving the right to purchase a pre-determined number of new shares at a pre-specified price and granted to loyal investors at the expiration of the loyalty period.

Patrick Bolton

Imperial College London, CEPR, NBER and ECGI
Barbara and David Zalaznick Professor of Business
Imperial College London
e-mail: p.bolton@imperial.ac.uk

Frédéric Samama

L-Shares: Rewarding Long-term Investors[1]

by

Patrick Bolton
Columbia University

and

Frédéric Samama
SWF Research Initiative and Amundi – Crédit Agricole Group

November 2012

Abstract: We argue that a fundamental reason for the short term perspective of corporate executives is the short-term orientation of shareholders and financial markets that drive the performance benchmarks of CEOs. In our view, long-term committed shareholders can provide substantial benefits to the company they invest in and although some shareholders are prepared to take a more long-term view, they are generally not rewarded for their loyalty to the company. We believe that because they are a scarce resource and provide benefits to the company and other shareholders that have all the features of a public good, long-term shareholders need to receive financial incentives. While lengthening stock option vesting periods and introducing claw-back provisions into CEO compensation contracts help induce a more long-term orientation of CEOs, we argue that it is also necessary to reinforce this more long-term performance-based compensation with a better alignment between shareholders and CEOs horizons. Our proposal for moving towards such an alignment is to introduce **Loyalty-Shares** (or **L-shares**). These shares provide an additional reward (usually under the form of an extra-share or extra-dividend) to shareholders if they have held on to their shares for a contractually specified period of time, the **loyalty period**. The reward we propose, which we believe would be a more optimal solution in many cases, is in the form of a warrant giving the right to purchase a pre-determined number of new shares at a pre-specified price and granted to loyal investors at the expiration of the loyalty period. This paper discusses how L-shares under the form of loyalty warrants can be structured and distributed, how they may be valued and how they may affect liquidity and control of the corporation.

1 We are grateful to Dominic Barton, Marco Becht, Max Von Bismarck ,William Bratton, Robbert Eccles, Ron Gilson, Edward Greene, Denis Gromb, Roger Guesnerie, Huang Haizhou, Olivier Hubert, Jin Liqun, Peter Knight, Jacques de Larosière, Stefan Lundbergh, Anna Pinedo, Augustin de Romanet, Howard Rosenthal, Joseph Stiglitz, Ernst-Ludwig Von Thadden and James Wolfensohn for many helpful comments. We also thank Alice Balagué, Elina Berrebi, Lucile Fournereau, Timothée Jaulin, and Kambiz Mohkam, for excellent research assistance. The views expressed in this paper are those of the authors and do not necessarily reflect the position of the Crédit Agricole Group.

Electronic copy available at: https://ssrn.com/abstract=2188661

I] INTRODUCTION

In his classic essay on the governance of organizations, *Exit, Voice and Loyalty*, Hirschman (1970) distinguishes between two different responses to a governance crisis by members of an organization (e.g. shareholders of a company). One is "exit", which in the case of a firm means that an individual shareholder sells her shares before the crisis becomes fully apparent to others. The other is "voice", which means that the shareholder holds on to her shares, gets involved, and attempts to resolve the crisis. Getting involved may range from simply voting against management at shareholder meetings to mounting a full-fledged proxy contest. Obviously, "exit" is the path of least resistance. But it is also the path least likely to bring about a good resolution to the crisis. The "voice" response is likely to be personally costly to the activist shareholder, while bringing uncertain rewards in the distant future, which moreover are shared equally by both active and passive shareholders.

As Hirschman's analysis emphasizes, "loyalty" to the organization is the critical variable that can tip the balance away from the easy "exit" option in favor of the "voice" strategy, which is individually more costly but likely to be collectively the better response for the organization. We argue however that loyalty can be gained more easily if it is rewarded. Some shareholders may be intrinsically loyal to their firm. This is especially true for founding shareholders who take pride in the success of their firm, and for owners of family businesses, who want to preserve the firm for future generations. But for the typical shareholder, there is no real sense of loyalty to a company.

It has been common to pit the market-based governance practices of the U.S. and the U.K., which favor liquid equity markets and hostile takeovers, against the bank-based and block-holder governance model of Japan and Germany, which favor governance by large controlling shareholders (see e.g. Coffee, 1991, Roe, 1994, and Franks and Mayer, 1995).[2] Institutional investors in the U.S.

2 In his recent report, John Kay (2012) takes up this observation and argues that public equity markets currently encourage "exit" (the sale of shares) over "voice" (the exchange of views with the company) as a means of engagement, replacing the concerned investor with the anonymous trader: "Only the analysis can acquaint investors with the long-term prospects of a company, and only as a result of analysis will companies receive relevant signals from the market about the direction of the business. Effective value discovery is necessary to the utility of either voice or exit as mechanism of performance enhancement." He further notes that: "The structure of the industry favours exit over voice, and gives minimal incentives to analysis and engagement."

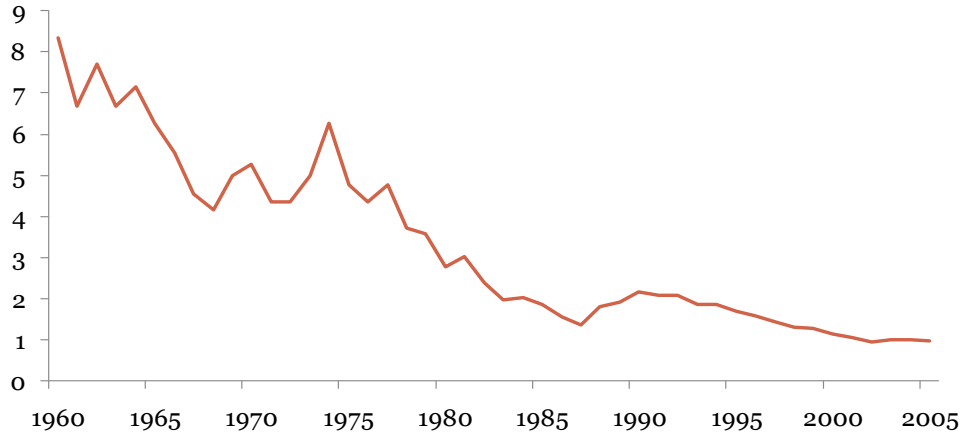
Electronic copy available at: https://ssrn.com/abstract=2188661

are also often described as following the simple *Wall Street Rule*:

"If you don't like the management sell your stock," an adage which, interestingly, Benjamin Graham has qualified by adding: "….provided you can get a fair price. If you can't, do something about the situation." [Graham (1954) pp.]

Alas, Benjamin Graham's important caveat is generally ignored by most institutional investors. Not only do these investors sell rather than get involved in companies facing governance crises, but also they appear to hold stocks for shorter and shorter periods. As the chart below highlights there has been a secular trend towards shorter and shorter holding periods of stocks by investors, and therefore a concomitant secular increase in secondary-market trading. This dramatic shortening of the average holding period of stocks is a reflection of the shorter and shorter-term outlook of the average stock-market investor in the U.S.

Average Holding Period for a stock on the NYSE (years)[3]



Source: NYSE overview statistics

As a result of this shorter-term outlook of investors, equity markets in the U.S. impose a *momentous short-termist pressure* on corporate executives, all the more so that in the last three decades the universal and exclusive performance benchmark for CEOs, analysts, activist investors and independent directors has increasingly become the stock-price performance of the firm (see

3 See Appendix I for further evidence on the shortening of the average holding period of stocks.

Electronic copy available at: https://ssrn.com/abstract=2188361

Gordon, 2007). Not only has the importance of the stock-based compensation-component in CEO pay steadily increased in the past thirty years (see Murphy, 1999 and Gabaix and Landier, 2008), but also the influence of independent directors, proxy advisory firms such as Instititutional Shareholder Services (ISS) and Glass Lewis, and the pressure exerted by activist hedge funds (see Brav, Jiang, Partnoy, and Thomas, 2008).

The rise of stock-option based pay has been motivated by the need to align the interests of managers with those of shareholders (Jensen and Murphy, 1990 and Holmstrom and Tirole, 1993). The argument was that, since—by the widely accepted *efficient markets hypothesis* (Fama, 1970)—stock prices on average reflect the long-term fundamental value of the firm, this form of executive compensation would encourage CEOs to maximize the long term value of the firm. The focus on stock price as a central performance measure and the pressure exerted by corporate raiders and activist hedge funds had a similar motivation.

But, recent history of bubbles and crashes, and especially the financial crisis of 2007-08 have, if anything, highlighted the limits of the efficient markets hypothesis, and have revealed the extent to which stock prices can substantially deviate from long-term fundamental value. To be sure, this succession of bubble episodes around the world in recent years has given new credence to the alternative *speculative markets hypothesis*. This new approach, dating back at least to John Maynard Keynes, and recently formalized by Harrison and Kreps (1978) and Scheinkman and Xiong (2003), argues that due to differences of opinion and short-sales constraints, stock prices reflect both the (long-term) fundamental value of the firm and a (short-term) *speculative option value*, which is simply the value of the option to sell the stock to a more optimistic shareholder in the future. As Michael Lewis has vividly described, a speculator like himself during the technology bubble, might purchase a stock, as he did with *Exodus Communications* at the end of 1999 simply because :
"[he] figured that even if *Exodus Communications* didn't wind up being a big success, enough people would believe in the thing to drive the stock price even higher and allow [him] to get out with a quick profit.." [Michael Lewis, 2002].

When differences of opinion are pronounced and persistent (that is, when *optimists* and *pessimists*

Electronic copy available at: https://ssrn.com/abstract=2188661

fundamentally disagree about a stock) the speculative option value may represent a substantial fraction of the stock price, so much so that short-run stock-price movements may have little relation with changes in fundamental value. Under these circumstances an exclusive focus on share price as a performance measure may produce highly destructive short-termist pressure on publicly traded firms. The speculative behaviour described by Michael Lewis only focuses on short-term price-movements; it is mainly concerned about *market sentiment* or other investors' psychology, and as such it is divorced from any effort to discover long-term fundamental value or the effects of CEO's decisions on the value of the firm[4].

Worse still, as Bolton, Scheinkman, and Xiong (2006) show, during speculative bubbles both shareholders and managers may have an interest in pursuing short-termist strategies that inflate earnings in the short-run and fuel the speculative option value. Stock-based CEO compensation then provides incentives to CEOs to pursue short-termist strategies to *pump and dump* the company's stock. Importantly, their analysis implies that CEO short-termism may not be caused by poor governance, but may actually be encouraged by short-term oriented shareholders[5].

Other important short-termist biases have been emphasized in the behavioural finance literature. Building on Shiller's (1981) finding that stock prices have historically been too volatile to be consistent with rational present discounting of future expected earnings, Barsky and DeLong (1993) show that the evolution of stock returns can be explained with a model in which shareholders are assumed to excessively *extrapolate* recent earnings growth. Several subsequent studies have confirmed the explanatory power of this excess extrapolation bias by shareholders, most recently Hirshleifer and Yu (2012) and Alti and Tetlock (2012).

Interestingly, Fuster, Hebert and Laibson (2011) suggest that the tendency to extrapolate short-term

4 As Levisohn notes in a (2010) Wall Street Journal article, a company's stock price or price-earnings ratio is less reliable as a measure of performance in periods when there is a lot of uncertainty and disagreement about future earnings. He also notes that in the post 2008-crisis high-uncertainty environment, as in previous periods like the great depression, investors tend to focus more "on global economic events" than earnings forecasts to determine whether a stock is worth holding (see "The Decline of the P/E Ratio" by Ben Levisohn, WSJ August 2010).

5 Interestingly, the recent study of risk-taking and executive compensation in U.S. banks and other financial companies by Cheng, Hong and Scheinkman (2012) finds that, while higher stock-based CEO compensation was correlated with greater risk-taking, it was unrelated to any governance failures. Simply put, CEOs were financially induced to take greater risks and they did not take these risks against the wishes of their shareholders.

Electronic copy available at: https://ssrn.com/abstract=2188661

earnings growth trends may not just be a behavioural bias of investors, but may be due to econometric forecasting methods which, in an effort to increase the robustness of short-term forecasts, tend to underweight long lags and therefore under-predict mean reversion of earnings in the long run.

Underpinning the short-termist pressure exerted by stock-markets is an entire eco-system that reinforces this predisposition. Thus for example, most asset managers' performance and compensation is benchmarked against market indexes, which tends to discourage a long-term outlook by institutional investors. Moreover, a greater proportion of institutional investors simply pursues passive, broad asset-class-allocation investment strategies, which means that a smaller fraction of shareholders is informed about any individual firm and its fundamental long-term value[6].

The short-termist outlook of most institutional investors is all the more worrying in light of the growing share of institutional ownership of US publicly traded corporations. As Jacobs (2011) powerfully emphasizes:

> "In 1951, individual retail investors owned over 75% of all outstanding corporate equities in the United States. By 1979, institutional investors as a group owned over 36%. Today, institutional investors, including public and private pension and retirement funds, mutual funds, and hedge funds control nearly 70%. Those institutional investors are managed by persons or firms whose compensation depends on generating short-term returns from the portfolio company shares under fund management. Those arrangements motivate these institutional investors to exert significant pressure on corporate managements and boards to deploy corporate assets and develop business strategies that will yield short-term profits, often at the expense of the long-term."

The concern is not only that the majority owners of US corporations (as a group) are managed with an excessive focus on short-run performance, but also that the shrinking fraction of retail owners will be discouraged from making a more active long-term commitment to these corporations.

6 While (pure) index funds were non-existent in 1980, they now represent around 15% of total mutual fund assets. If one also includes "closet indexers" among index funds, then this share rises to over 40% of total mutual fund assets (see Petajisto, 2010).

Electronic copy available at: https://ssrn.com/abstract=2188661

Another growing trend, which further absolves institutional investors from closely examining the businesses they hold in their portfolio, is the greater and greater reliance on proxy advisory firms. Since 2003, mutual funds are required to disclose how they are voting and the effect of this regulation has mostly been that funds rely on proxy advisors to determine how they should vote. As a result, the two large proxy advisors that dominate the proxy advisory market have become increasingly influential in rating corporate behavior. This means that corporations that seek to pursue innovative, long-term, off-the-beaten-track strategies are now facing a greater challenge in overcoming the potentially flawed 'conventional wisdom' based on superficial research that is spread by the proxy advisors throughout the institutional investor community.

What are the consequences of the stock market's growing short-termist bias? In a nutshell: missed investment opportunities, greater risk, and more timid planning and innovation. As Graham, Harvey and Rajgopal, (2005) have shown, when it comes to managing reported earnings in an effort to artificially boost the firm's stock price, managers are not just ready to engage in dubious accounting manipulation, but are also prepared to forego profitable investment opportunities, which would increase the long-run fundamental value of the firm.

The extrapolation bias of short-termist shareholders also results in greater risk. Companies may be pressured to meet the market's unrealistically high earnings growth expectations by taking on too much leverage, thus raising the *equity beta* of the firm. Brochet, Loumioti and Serafeim (2012) find evidence of this effect: they show that those firms with a more short-term focus and a more short-term oriented shareholder base (as revealed from conference call transcripts with analysts and investors) tend to have higher equity betas.

One of the bedrocks of long-term planning is the effort to identify and anticipate the long-term trends, which will bring about the fundamental changes to which the firm will need to adapt. It is, of course, far from obvious to spot these trends, but it has been suggested that environmental, social and governance performance measures (ESG factors) can be helpful leading indicators of important social, cultural and environmental changes to come. Thus firms that pursue a long-term, sustainability policy could be in a better position to anticipate social and environmental changes that

Electronic copy available at: https://ssrn.com/abstract=2188661

will affect the bottom line of their business in the long run. Stock markets, if anything, penalize firms that do well on ESG measures in the short run, as ESG policies tend to come at the expense of reported earnings. However, as Eccles, Ioannou and Serafeim (2011) have shown, those firms that have been able to overcome short-termist pressures and have implemented ESG policies have also significantly outperformed in the long-run their counterparts which have not pursued these policies.

Unfortunately, the majority of publicly traded corporations only pay lip service to ESG factors (for example, Eccles, Ioannou and Serafeim only have 90 "high sustainability" firms in their sample[7]) and most publicly traded firms tend to succumb to the short-termist pressures of equity markets. This is why more and more commentators in academia, in the investor and business community, and in policy circles have voiced concerns about short-termism in the aftermath of the great recession[8]. But, what can be done to overcome the excessive short-term orientation of the entire financial ecosystem?

One area that has been the focus of close attention in the wake of the crisis of 2007-08 is executive compensation, especially in the financial industry. There has been a recent shift towards longer vesting periods for stock options, the introduction of claw-back provisions, deferred bonus payments, and generally a more long-term oriented pay structure for executives in the financial industry. It is, however, less clear how much this shift has extended beyond the financial industry. It is also not completely obvious whether this move towards longer term pay will have the intended effect of reorienting managers' outlook more towards the long term. As Laux (2011) argues, while longer vesting periods do encourage a more long-term orientation, the greater risk of option forfeiture in case of early dismissal, can actually induce managers to become more short-termist. This is especially of concern if the board of directors and the shareholder base remain biased towards short-term performance.

But even if the deferred compensation induces a more long-term stance, this effect will be limited if

7 This number is admittedly extremely low since their study goes as far back as the 1980s. Nowadays, a substantially larger number of firms is paying attention to ESG factors.
8 The Aspen Institute (2009), Barton (2011), Milton (2010) and Bachelder (2012) for examples of recent reports on short-termism.

Electronic copy available at: https://ssrn.com/abstract=2188661

the overall financial ecosystem remains short-termist. Accordingly, a number of proposals have been made to reduce the short-termist bias of public markets. Thus, Blood and Gore (2012) recommend that corporations stop offering short-term earnings guidance to analysts, as some major companies like Coca-Cola, IBM or Google have done, and instead communicate about their long-term strategies with investors (see Barton, 2011). Another proposal is to lengthen the terms served by directors on corporate boards and to space out elections of directors to, say, every five years (Jacobs, 2011).

But, the impact of these changes is likely to be limited if shareholders' viewpoint remains short-termist. As Strine (2010) has observed:

> "[I]t is jejune to demand that CEOs and boards manage for the long term when the stockholders who can replace them buy and sell based on short-term stock price movements, rather than the long-term prospects of firms. It is contradictory to demand managerial responsiveness to stockholders sentiment, and then criticize managers for failing to resist stockholder demands for riskier business strategies and more highly levered balance sheets."

Hence, he argues that institutional investors, who collectively own over 70% of US publicly traded stocks, must also be induced to change their investment horizon. According to him, one way to promote a longer horizon outlook by institutional investors is to push proxy advisors to determine their voting recommendations from the perspective of a shareholder intending to hold the stock for at least five years.

Other proposals to lengthen shareholders' investment horizon center on discouraging speculation and taxing short-term gains from speculation. The financial transaction tax recently approved by Germany, France, and other Euro-member countries is partly motivated by this aspiration to curb speculation. Similarly, the Aspen Institute (2009) proposal to change the current capital gains tax rules, which tax capital gains realized within a fiscal year as ordinary income, but apply only a 15% tax on all capital gains realized past the one-year threshold, to a regime where capital gains are taxed

Electronic copy available at: https://ssrn.com/abstract=2188661

on a sliding scale at a rate that is inversely proportional to the length of time a stock has been held, is also designed to discourage short-term speculation[9].

Of course, a radical solution against potentially destructive short-termist market pressures could be to simply take the firm private. This has indeed been a key argument put forward by private equity funds to motivate their investment strategy. While this solution may be appropriate for some firms, it cannot, however, be generally pursued by all listed firms, for the simple reason that the overwhelming share of pension savings can only be tapped by firms listed on organized equity markets with a liquid secondary market for stocks.

While taxation of financial transactions, changes in the tax law governing capital gains are major interventions in capital markets, and delisting of a company's stock is a radical step to escape the short-term exigencies of investors, a somewhat more cautious and controlled change that we propose in this paper is to modify the form of the common share contract typically offered to investors in stock markets to reward a longer-term orientation of investors. The change we propose is to offer investors what we refer to as *Loyalty-Shares* (or L-shares for short) which reward buy-and-hold investors with a free call-option, or warrant, if they have held their shares for a pre-specified loyalty period (say, three years)[10].

These loyalty warrants (L-warrants), which can be offered by listed companies indiscriminately to all shareholders, would be especially attractive to those shareholders seeking more long-term buy-and-hold investments. Currently, such shareholders have little choice but to invest in regular common stock and receive rewards that are essentially independent from the length of time they hold the shares. These buy-and-hold shareholders are moreover at a disadvantage relative to more speculative traders, who can cash in on a speculative option, or respond more quickly to news and "exit" before the buy-and-hold shareholders.

---

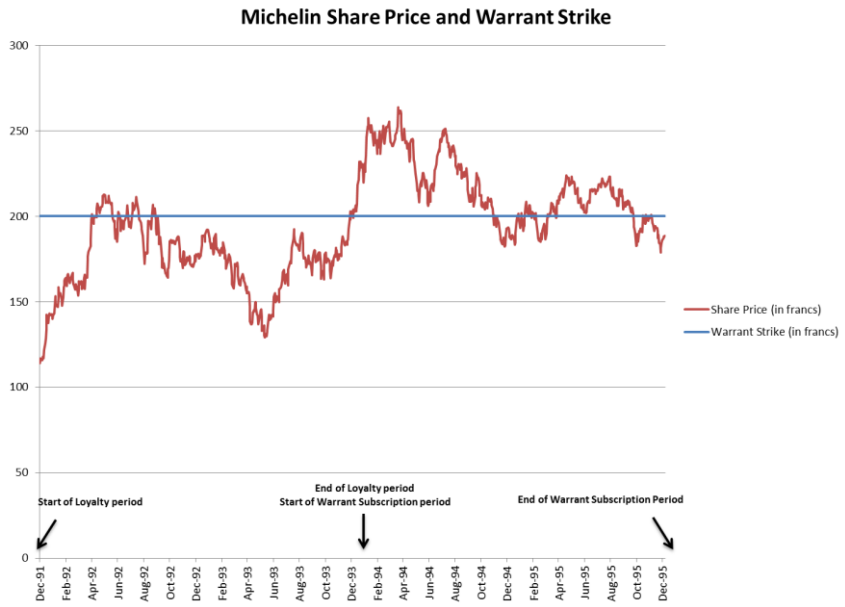
9 See also Stiglitz (1989) for an early similar proposal along these lines.

10 The reward can also take the form of a special dividend or greater voting rights. We believe that a call-option has additional benefits over a dividend payment, but the key point is to introduce rewards for long-term investors whichever form they take. Note also that we shall repeatedly refer to an example with a three-year loyalty period. There is obviously nothing magical about the three-year period. The loyalty period could be much shorter (a week; a month) or longer depending on the particular circumstances of a corporation and the objectives of long-term investors.

Electronic copy available at: https://ssrn.com/abstract=2188661

We believe that *L-shares* would go some way towards redressing the current imbalance between long-term and short-term investors. In particular, they would attract long-term non-speculative investors, by providing a reward to those shareholders who have held their shares for a pre-specified period of time, and they would repel day-traders, momentum investors, and other short-term speculators. They would also encourage a more long-term valuation outlook, as those shareholders seeking to obtain the loyalty reward would have to make an assessment as to the company's value at the expiration of the loyalty period.

There are already a few examples of such types of shares, but at this point it is fair to say that they are rather uncommon. One early example is the case of *Michelin* in 1991, which has granted L-shares (in the form of a warrant) following a dividend cut to compensate the most loyal shareholders for this loss in income. Specifically, Michelin granted one call-warrant for every 10 shares held on December 24th 1991. The call-warrant was exercisable at a four year horizon (December 31rst 1995) at an out-of-the-money strike price of FRF 200, compared with a share price of about FRF 115 at the time of the announcement. The CEO of Michelin motivated the L-shares at the time by saying: "Long-term oriented shareholders, who hold on to their shares during the difficult but critical time the company is facing [will thus be rewarded]" In addition, all the shareholders who held on to their shares for the two year period between 1991 and 1993 were rewarded with an extra warrant.



Electronic copy available at: https://ssrn.com/abstract=2188661

More recently, *L'Oreal* offered a *Loyalty bonus* to registered shareholders (proposed at the Annual General Meeting of April 16th, 2009), which granted a 10% incremental dividend to all shareholders having held registered shares for at least two years, up to a limit of 0.5% of nominal capital per shareholder (as defined in the article L232-14 of the French Commercial Code). Similarly, the French firm *Electricité de France* (one of the largest electric utility companies in the world) and the French bank *Credit Agricole* agreed to implement respectively *Loyalty bonus* and *Preferential dividend* schemes. These preferential dividends, both approved in May 2011, present exactly the same design as *L'Oreal*'s loyalty bonus. A different example is *Air Liquide*, which offered both a dividend and a share bonus to all shareholders who kept their shares for at least two years. Finally, a few more examples can be found in demutualized U.K. life insurance companies and building societies. *Standard Life* thus offered shareholders who would hold on to their shares after flotation for a pre-specified time period a one-time additional share for every 20 shares held.

Although there are so far only a handful of examples of shares rewarding long-term investors for their loyalty, several prominent commentators have recently spoken in favor of such types of shares, most notably, Vice President Al Gore who argues in favor of long-term investing strategies buttressed by loyalty-based securities (see, Blood and Gore 2012), and John Bogle who wrote:

"In addition, policy makers ought to be considering structural changes that would enhance the role of investors and diminish the role of speculators. For example, granting longer-term (say, two- to five-year holders of stock) extra voting rights and/or a higher dividend; a federal transfer tax on securities transactions; or a tax on short-term realized capital gains (say, shares held for less than six months), applicable to taxable as well as tax-exempt investors such as IRAs." [John Bogle, January 18, 2010, *Wall Street Journal*]

In this paper we analyze a particular form of L-share, which attaches a call-warrant to a common share, that vests only if the shareholder continuously holds her shares for a specific period of time (whether directly or under a street name). We show how such shares can both induce greater shareholder loyalty and be attractive to more long-term strategic investors. We discuss how such shares could be structured: the length of the time period; whether the warrants should be renewable and recurrent; whether and how the company should engage in share repurchase programs to reduce

Electronic copy available at: https://ssrn.com/abstract=2188661

ownership dilution; how such shares should be treated in an acquisition, or in the event of a bankruptcy filing; what the consequences are for secondary market liquidity of both common and L-shares; whether L-shareholders get special board representation or not; what the accounting treatment of L-shares is likely to be; what the tax implications are for L-shares, etc.

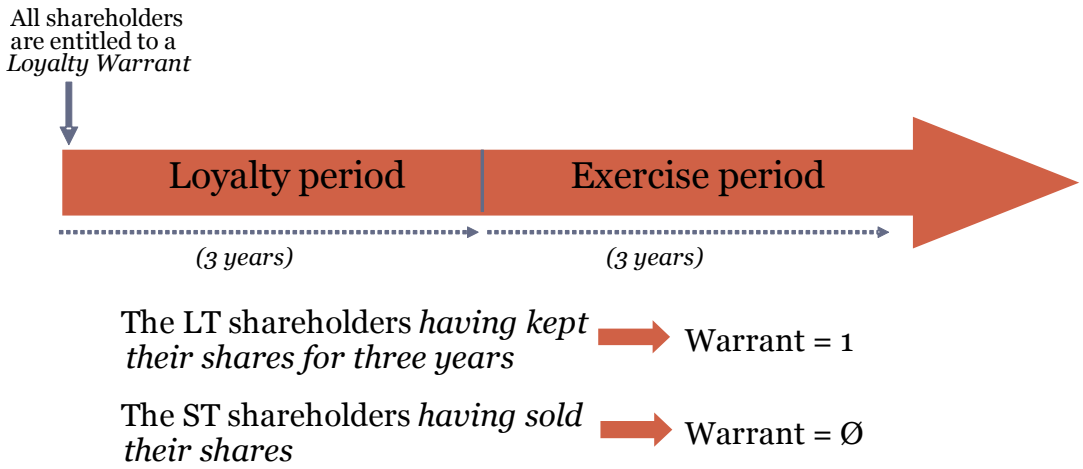
The remainder of the paper is organized as follows. We begin by describing the proposed design for an L-share and how its features may be adjusted with respect to the issuing firm's objective in Section II. We next examine in Section III the benefits and uses of the L-shares depending on the specific transactions the firm may contemplate. We then turn in Section IV to the analysis of the likely effects of the introduction of L-shares on the firm's secondary market for common stock. We discuss the pricing of the L-shares in Section V, and the various institutional and contracting issues with their implementation in Section VI. Eventually, we compare different types of rewards for loyalty in Section VII and conclude in Section VIII.

II] L-SHARES: HOW WOULD THEY WORK?

The type of loyalty share (L-share) we propose is a reward in the form of a call-warrant attached to each share that is exercisable at a fixed time-horizon (say, three years) and at a fixed exercise price. The main difference with an ordinary warrant is, thus, that the right to exercise the warrant is only obtained if the holder of the L-share holds the share for the entire length of a pre-specified "loyalty period". If the L-share is sold before expiration of the loyalty period the right to the warrant is lost. In other words, the warrant attached to an L-share is not transferable. In this respect the L-share is similar to an executive stock option, which is also not transferable and only vests after a fixed period of time.

Electronic copy available at: https://ssrn.com/abstract=2188661

The figure below provides an illustration of how an L-share could be designed.



An important feature of L-shares is that it is solely the behavior of shareholders that determines the ultimate ownership (or not) of the L-warrants. In this example all shareholders are equally treated at the time of the offer. It is only their trading behavior that induces an ex-post difference in their treatment. Those shareholders who hold the L-share until the end of the loyalty period are granted a warrant that is exercisable over a pre-determined period. Once they are granted the warrant they can trade it, but prior to the expiration of the loyalty period no trade is possible. The mere trade of an L-share cancels any right to a future warrant in this example.

The strike price of the warrant may be set in different ways depending on circumstances. It could be: 1) a simple 'at-the-money' call, with the price given by the market price of the L-share at the time it is granted; 2) the minimum of the stock price at the time the L-share is granted and the lowest of the prices over the loyalty period; 3) a strike price that is calculated at the time of expiration of the loyalty period to be equal to the average stock price over the loyalty period. The latter two formulations would correspond to look-back options, the last one being akin to a so-called *Asian Look-back Call Option*.

The main advantage of allowing for adjustments in the strike price to reflect changes in stock prices

Electronic copy available at: https://ssrn.com/abstract=2188661

over the loyalty period, is that the warrant's value may then be less affected by price drops over the loyalty period. In other words, the L-warrant is then less likely to be out-of-the-money at the time of expiration of the loyalty period. Thus, if the firm's goal is to retain a long-term oriented, loyal, shareholder base in a bear market it can achieve this by adjusting the strike price in this way.

The precise terms a firm sets for its L-shares can generally depend on the fraction of shareholder value the firm intends to allocate to loyal shareholders and on the intentions the issuer wants to convey to the market. Thus, for example, a straight at-the-money call option could *signal* the firm's belief that it does not expect its stock price to fall and that therefore it is not necessary to include any look-back feature into the L-warrant. That is, when the form of the strike price of the warrant is disclosed to the market, it can convey information about what the issuer expects the long-term value of its shares to be. Therefore, the determination of the strike price is likely to be an important decision for the firm.

An attractive feature of our proposed structure for L-shares is therefore that they offer greater *buy-and-hold* incentives for shareholders in turbulent times. In particular, given that the value of the warrant increases with volatility, L-shares become more attractive (other things equal) when stock price volatility increases[11]. Buy-and-hold incentives are thus strengthened just in times when they may be most needed.

How would L-shares be distributed? For a company that is already publicly traded, the simplest approach would be to announce that all shareholders are granted an L-warrant per share. Alternatively, the firm could issue L-shares through a rights issue. But L-shares could also be privately placed if a strategic investor is targeted. For a privately held firm contemplating an IPO, the warrants could be offered along with the shares floated. If the goal is to achieve as broad a loyal shareholder base as possible then the IPO agreement could allow for warrants being granted to all shares at the expiration of the lock-up period. The main technical difficulty with distributing L-shares is that the company must put in place a system to track ownership of its shares through the loyalty period, to be able to determine which shareholders are loyal and which are not. We describe

11 Note that this value can however not be monetized. This is also the case for Loyalty dividends.

Electronic copy available at: https://ssrn.com/abstract=2188661

in detail how the company can do this, while preserving shareholder anonymity in section VI.2 below.

So far we have described only the simplest possible form of L-share: a share with a one-time warrant attached, which *vests* at the expiration of a given loyalty period. Such a share makes most sense if the goal of the firm is mainly to delay a dividend payment or to secure a temporary alliance with a strategic partner. However, if the firm's objective is to secure a more permanent loyal shareholder base then—following a practice similar to that adopted by *Air Liquide*—the L-share may be structured to allow for recurrent grants of loyalty warrants at the expiration of each loyalty period, or conceivably even grants of new L-warrants with overlapping loyalty periods (for example a three-year overall loyalty period with new L-warrants granted every six months).

Under such an arrangement, new shareholders over time can also become loyal shareholders, so that the fraction of loyal shareholders at any time remains stable. One potential problem for the firm under a more permanent loyalty arrangement, however, is how it would address the dilution of share ownership that could result from repeated exercises of L-warrants. As with executive and employee stock ownership programs, the firm may choose to put in place a share repurchase program to undo the increase in share ownership resulting from the exercise of L-warrants. Obviously, how the firm corrects for the growth in outstanding shares will depend on the situation it faces. If the firm has many growth opportunities and is engaged in a large capital expenditure program then it makes sense to let the number of shares outstanding grow with the size of the firm. If, on the other hand, the firm has reached maturity then it may be desirable to maintain a target earnings-per-share ratio and therefore to engage in a sterilizing share repurchase program.

III] BENEFITS AND USES OF L-SHARES

Besides inducing shareholders to take a more long-term perspective in broad terms, L-shares may also be helpful instruments for more specific transactions the firm might contemplate. We briefly touch on these more specific uses in this section.

Electronic copy available at: https://ssrn.com/abstract=2188661

III.1. Rewarding costly long-term monitoring by a large shareholder

Block-holders and activist shareholders provide a "public good" to all shareholders when they monitor management and intervene to correct inefficient managerial policies (see e.g. Bolton and Von Thadden, 1998). These shareholders shoulder most of the costs of these activities, but spread the benefits to the entire shareholder base. They are, however, prepared to engage in costly monitoring and interventions only if their own rewards exceed the costs. Unfortunately, successful activism often requires sustained involvement over a long period of time. In addition, the results of the intervention may only become apparent after a few years. Thus, activist shareholders may only be able to reap the rewards of their interventions after a substantial amount of time has elapsed. This time lag between the costly intervention and the return from the intervention requires compensation, which L-shares are well suited to provide. Indeed, L-shares would allow the firm to discriminate between ordinary (short-termist) shareholders, who do not require special compensation, and interventionist shareholders, who must be compensated for both their costly monitoring and the illiquidity of their equity holdings until the effects of their intervention become visible and can be capitalized. We illustrate how this discrimination can work in the numerical example below.

Numerical Example:

Consider a firm operating over two time-periods. At time $t = 0$, the firm's stock price is dragged down by the uncertainty around its future solvency. The firm has 1000 shares outstanding and a debt liability of $D = \$900$ to be repaid at time $t = 1$. Investors believe that the firm's stock may be worth either \$1.35 per share, with probability 2/3, or \$0 with probability 1/3 at $t = 1$. That is they believe that the firm's assets are worth $V = \$2250$ with probability 2/3 and $V = \$800$ with probability 1/3, in which case the firm would go bankrupt at $t = 1$ (since $V < D$). Investors are therefore willing to hold their shares at time $t = 0$ at a price per share no higher than \$0.9. The firm, however, will fail immediately unless the firm's stock price is at least equal to \$1 at $t = 0$.

Now, long-term investors can monitor the firm's management at a cost of \$0.05 per share, and through their 'due diligence' they can discover how profitable the firm will be in $t = 1$. Should they discover that shares are worth \$1.35 per share it is clearly efficient to let the firm continue until time

Electronic copy available at: https://ssrn.com/abstract=2188661

t = 1. But, in the absence of any monitoring by long-term investors the share price will be no higher than $0.9, too small to allow the firm to continue until time t = 1. Long-term investors are only willing to incur the monitoring cost if they can recoup it through a capital gain.

If the firm issues only common stock, then long-term investors can never hope to recoup their due diligence cost. Either they purchase the stock at price $0.9 before incurring the due diligence cost, in which case they make an expected loss per share equal to their due diligence cost of $0.05. Or they first incur their due diligence cost and then bid for shares when they learn that they will be worth $1.35 at t = 1. But then the share price is bid up to $1.35 and again they lose their due diligence cost.

If, however, the firm has issued L-shares then it is possible to discriminate in favor of long-term investors and allow them to recoup their due diligence costs. Suppose that short-term investors sell their shares at the end of the first period, and that long-term investors hold their shares until time t =1. Suppose also that the L-shares grant a warrant (with parity 1 and strike price 1.2) to anyone holding the shares until time t = 1 with an ex-ante value[12] at t = 0 of w = 2/3*(0.15) = $0.1[13]. Long-term investors will then obtain an additional reward of $0.15 whenever the share price reaches $1.35, which allows them to more than recoup the monitoring cost $0.05. This example illustrates that L-shares can serve the role of disproportionately rewarding investors who are willing to incur costs to find out what the long-term fundamental value of the firm is likely to be. Even if this information leaks out through their trades, long-term investors will still be able to recoup their information acquisition costs as the value of the information they produce is worth more to them (because of the loyalty reward) than to short-term investors.

III.2. Postponing a costly dividend payment or stock repurchase

In times of financial stress, firms in need of cash may want to temporarily suspend a costly dividend payment, or postpone a planned stock repurchase. Firms are generally loath to cut dividends, as the

12 A simple way of pricing the warrant has been adopted in this discrete framework. It does not take into account any correction for dilution (to this end, one would need to know the proportion of long-term investors). See part V for a more thorough discussion on pricing in a continuous-time framework using a classical Black-Scholes style warrant pricing formula.

13 It is straightforward to adjust the ex-ante value of the warrant through the parity, with a parity of 1 for 2, the ex-ante value of the warrant would be $0.05 and equal the cost of value discovery.

Electronic copy available at: https://ssrn.com/abstract=2188661

likely reaction by the market to an announced dividend cut is a sharp decline in stock price. However, as the example of the dividend cut of *Florida Power and Light* (*FPL*) in 1994 illustrates, when the economic logic behind the dividend cut is sound and when the change in dividend policy is communicated well to the market then the decline in stock price may only be temporary (see Soter and Evanson, 1996) . One notable feature of FPL's dividend cut policy was to accompany the announced cut with a partially offsetting stock repurchase, which had the effect of dampening the negative price reaction but also mostly undid the cut. An alternative, more logical, approach could be to substitute a dividend payment with an L-share offer, which would simply move the payment to shareholders later in time, in a state of the world when the firm is in better shape.

This is exactly what *Michelin* did in 1991, when it offered shareholders a classic out-of the money warrant, exercisable in two years in exchange for a dividend cut. More precisely, the warrant could be exercised only by those shareholders who would have held on to their shares for the two years (without any interruption). This highly innovative move by *Michelin* was motivated by its management at the time as a way of saving precious cash reserves during a difficult period and of compensating and rewarding those shareholders who would remain loyal to the firm during the difficult transition period.

III.3. Securing a strategic alliance

Short of a sale or a full merger deal, any strategic long-term investment could be enhanced by a grant of L-shares to the strategic investor. This would strengthen the strategic partner's long-term commitment, while maintaining the partner's ability to trade its shares in the event of a liquidity shock. In practice strategic investments often involve lock-up provisions for a period of time or early redemption penalties. L-shares can be seen as achieving the same objective with a "carrot" as opposed to a "stick". L-shares may also support a more 'flexible' long-term commitment by focusing on the benefits of staying loyal to an ultimately successful venture without imposing an unduly severe penalty on the L-shareholder for leaving a sinking enterprise. Indeed, if the firm is mismanaged and as a result underperforms, the underlying share price will decline, so that the L-warrants will be 'out-of-the-money' and worthless. Nothing would then stop the L-shareholder from selling her shares before the commitment period expires.

Electronic copy available at: https://ssrn.com/abstract=2188661

Granting L-shares to a strategic investor when the firm is going through a period of financial stress is also a way of signaling to the market the strength of the investor's commitment and his belief in the ultimate turnaround of the company. Thus, when Warren Buffet made a critical equity investment (which had some characteristics resembling an L-share) in Goldman Sachs in the midst of the financial crisis he was able to send a strong message to the market that he believed that Goldman Sachs would pull through[14]. Ironically, an unintended aspect of the TARP equity injections in the largest financial institutions during the crisis (namely, the warrants granted to the government) also had important L-share characteristics. While the U.S. treasury's concern mainly was to hide the extent of the equity stakes the government was taking in some of the banks, the effects of the warrant grants was similar to those of an L-share investment; in fact, the Emergency Economic Stabilization Act of 2008 (EESA) requires financial institutions selling assets to the TARP to issue equity warrants (for non-voting shares only) to the Treasury. This measure was giving the Treasury the possibility of profiting through its new ownership stakes in these institutions. Ideally, the Treasury would have benefited from the financial institutions' recovery and new strength on a long-term horizon. As an example, when Goldman Sachs received $10 billion of TARP money, the warrants were carrying (for 10 years) the right to buy 12.2 million Goldman shares at $122.90 each. The day of the repurchase, the Goldman share was traded at about $160.65 and Goldman Sachs paid the government $1.1 billion to redeem the stock-purchase warrants when the estimate range was $1.12 billion.

III.4. Facilitating a share issue

Book-building, under-pricing and flipping are integral parts of the equity offering process. Firms and underwriters' main concerns with IPOs are typically to generate enough interest in an issue, without excessive *under-pricing* and *flipping*. During an IPO the last thing the issuer wants to see is shareholders getting in and out just to make a quick profit from the under-pricing. Interestingly, L-shares could be an effective response to those concerns. Buy-and-hold investors would be more willing to

14 Under this deal, struck on 23rd September, 2008, Warren Buffet agreed to purchase $5 billion worth of preferred shares in Goldman Sachs against a promised perpetual annual dividend of 10%. In addition, Warren Buffet was to receive warrants to buy up to $5 billion worth of shares for a period of 5 years, which were immediately exercisable at a strike price of $115 (the share price was $135 at the announcement of the deal).

Electronic copy available at: https://ssrn.com/abstract=2188661

subscribe to an L-share issue, thus reducing all these concerns in one stroke. To see this, consider the following simple example where the IPO valuation delivers a price of 99.5, and suppose that the L-warrant is worth 1, but long-term investors represent only about 50% of subscribers. Then the expected cost of the warrant to the firm is only 0.5, so that each share offered is worth 99.5 without the warrant, and 100 with the warrant (given that only 50% of subscribers are long-term shareholders). Then the L-shares could be offered at 100, giving long-term investors an expected value of 100.5 against a value for short-term investors of only 99.5. Short-term investors would then be slightly more reluctant to subscribe just to take advantage of the potential discount associated with the IPO valuation (everything equal they would incur a .50 cost), while long term investors would have an initial gift of 0.5. An interesting precedent for such an offering is the former mutual insurance company *Standard Life* issue[15,] which offered a form of loyalty share to all its mutual shareholders between its IPO and the first anniversary of the IPO. The parity of the L-share was 1 for 20[16].

IV] THE EFFECTS OF LOYALTY SHARE ISSUES ON THE MARKET

Having outlined the main features and purposes of L-shares we now turn to the analysis of the likely effects of the introduction of L-shares on the firm's secondary market for common stock.

IV.1. Transfer of Wealth from short-term to long-term investors

A first key effect of the introduction of L-shares is a possible transfer of wealth from short-term to loyal shareholders. This effect follows directly from simple *Modigliani and Miller logic*, if one assumes that aggregate firm value is a given constant amount that is unaffected by the introduction of L-shares. We illustrate this wealth transfer in a numerical example given in table A.

15 Another example could be find in the French law, according to the Article 12 of the "Loi n° 86-912 du 6 août 1986 relative aux modalités des privatisations", when the French Treasury sells its shares in a private company on the financial markets, the transaction must be proposed to the company's employees that can benefit - if they have kept their share at least one year – from a granting of shares that cannot exceed one share by share bought from the French Treasury.
16 Similarly L-Shares may be helpful to secure and stabilize a capital increase following the conversion of a convertible bond.

Electronic copy available at: https://ssrn.com/abstract=2188661

In this example the share price prior to the introduction of L-shares is set at $100 and there are 10 million shares outstanding. An L-share is introduced in the form of a rights issue granting every share a warrant worth $2 in present value at the expiration of the loyalty period. Now suppose that there are 10% long-term shareholders who hold the L-share until expiration of the loyalty period. Then by Modigliani and Miller, the incremental average value per L-share must be transferred from the value of common shares to maintain the aggregate capitalization constant. This means that mechanically the introduction of L-shares results in a stock-price decline of $0.2, so that the post-issue price of common shares is $99.8. The 10% fraction of loyal shareholders therefore extract a transfer of $1,800,000 from the 90% other short-termist shareholders.

By assuming that the firm's aggregate capitalization remains constant, this example obviously exaggerates the size of the wealth transfer. If the introduction of L-shares induces value creation through a more long-term outlook then this value creation will also be shared by short-termist shareholders. Conceivably, the value creation induced by the longer term orientation may be so large that no cost is imposed on short-termist shareholders.

IV.2 Change in Ownership Structure

Inevitably, at the expiration of the loyalty period and following the exercise of the L-warrant, the shareholder base will shift composition towards more long-term oriented shareholders. This shift is reinforced, if the company chooses to undo the share dilution following the exercise of the warrants with a share repurchase program. The example in Table B illustrates the effect of a share repurchase program under the assumption that the L-warrants represent 10% of the firm's equity ex post (and 1% ex ante, before shareholders know whether they will be able to hold the shares until expiration of the loyalty period or not).

What this example illustrates is that, as the shares are repurchased from short-term shareholders, the share repurchase program will enhance the shift in ownership towards loyal investors. A practical question is when the repurchase should take place, in anticipation of or after the warrants are exercised? The issue is about price and cash management. If the repurchase is planned for after the warrants are exercised the firm will be uncertain about the price. If, on the other hand, the

Electronic copy available at: https://ssrn.com/abstract=2188661

repurchase is upfront the price will be known but the uncertainty will be on the number of outstanding shares and consequently the firm's cash reserves, as the firm won't know whether the warrants will be exercised or not.

TABLE A: ***Transfer of Wealth from short-term to long-term investors***

Terms of L-Shares

Maturity:	6 Years
Loyalty Period:	3 years
Strike:	At the Money
Parity:	10 for 1
Volatility:	24%
Div Yield:	2.0%
Interest rate:	2%
Price of the share:	$100
Price (for LT shareholder):	$2
Price (for ST shareholder):	$0
Expected value:	$0.2

Capital Structure

ST Shareholders:	90%
LT Shareholders:	10%

Electronic copy available at: https://ssrn.com/abstract=2188661

TABLE A: ***Transfer of Wealth from short-term to long-term Investors (continued)***

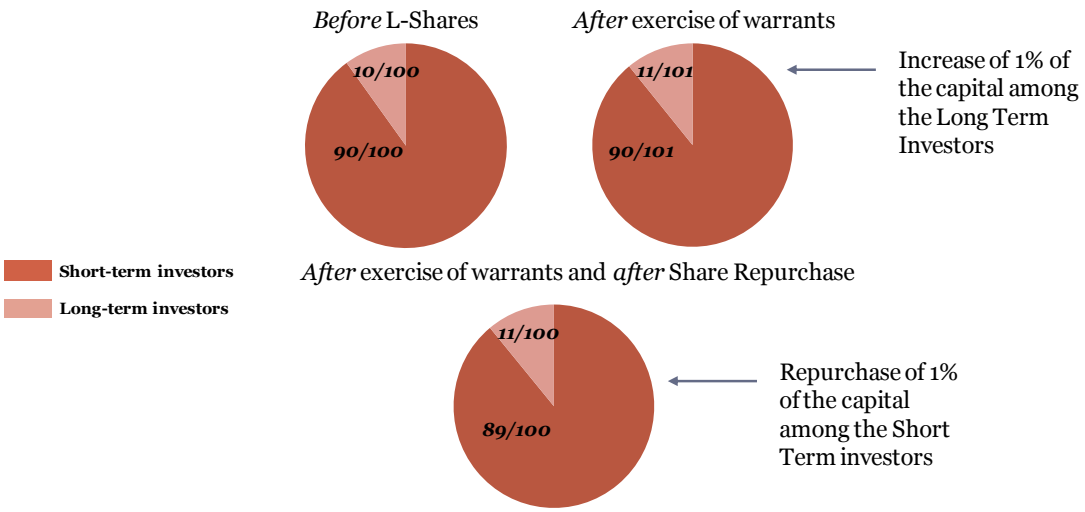
	Short Term Investors	*Long Term* Investors
Before L Share		
Number of Shares	9,000,000	1,000,000
% of the capital	*90%*	*10%*
Price	$100	$100
After L Shares		
Theroretical Value [1]	$2	$2
Value with Probability [2]	$0.2	$0.2
Value for the Owner	$0.0	$2.0
Price of the Share	$99.8	$99.8
Value for each Sharehold	$99.8	$101.8
Total Gain/Loss	- $1,800,000	$1,800,000

[1] Without taking into account the probability

[2] Takes into account the probability. But only the Long Term investors will get it

Electronic copy available at: https://ssrn.com/abstract=2188661

TABLE B: ***Change in Ownership Structure***



	Short Term Investors	Long Term Investors
Before L Share		
Number of Shares	9,000,000	1,000,000
% of the capital	*90%*	*10%*
% of the voting rights	*90%*	*10%*
After L Shares		
New Shares coming from L Warrants		100,000
Number of Shares	9,000,000	1,100,000
% of Capital and Voting Rights	*89.1%*	*10.9%*
After L Shares and Share Repurchase		
Share Repurchase [1]	100,000	
Number of Shares	8,900,000	1,100,000
% of Capital and Voting Rights [2]	*89.0%*	*11.0%*

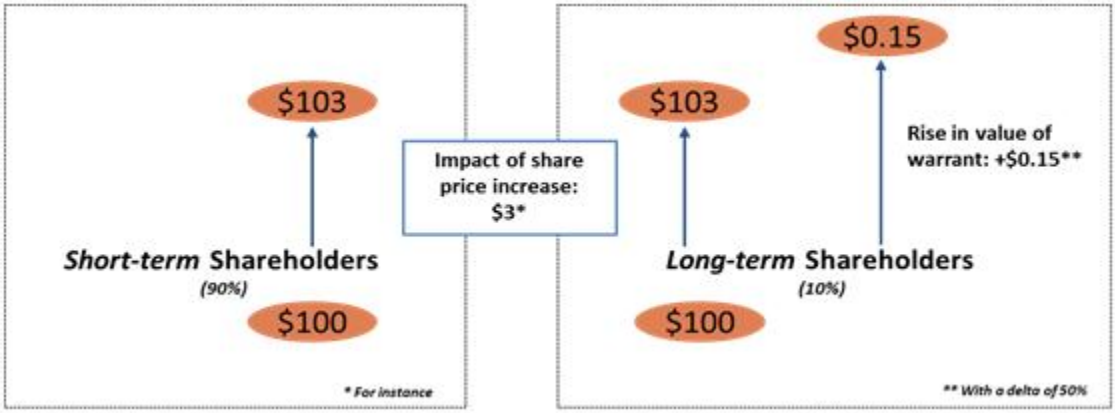
[1] By construction, only the short term investors are selling their shares
[2] With the hypothesis that the warrants are exercised

Electronic copy available at: https://ssrn.com/abstract=2188661

TABLE C: ***How different Shareholders gain from a Share Repurchase Program***

		Short Term Investors	*Long Term* Investors
Before L Share			
Number of shares		9,000,000	1,000,000
% of the capital		*90%*	*10%*
Share Price		$100	$100
New Shares coming from L Warrants			100,000
Share Repurchase			
Quantity		100,000	
Share Price		$103	$103
Assets Owned			
	Cash	$10,300,000	$0
	Value of Shares	$916,700,000	$103,000,000
	Intrinsec Value W (1)		$150,000
	Total	$927,000,000	$103,150,000
Change		3.00%	3.15%

(1) We assume a delta of 50%.



Electronic copy available at: https://ssrn.com/abstract=2188661

IV. 3 How different Shareholders gain from a Share Repurchase Program

A share buy-back program affects different types of investors differently: long-term investors benefit more from the resulting share price increase than short-term investors, as they stand to gain both on the shares they own and on the warrants they receive at the end of the loyalty period. The example in Table C, in which the repurchase program is equal to the new shares issued following the exercise of the L-warrants (10% of the initial capital) illustrates this differential effect.

Long-term shareholders benefit more from the program than short-term investors, as they also receive a capital gain on the warrants. The share repurchase program also delivers a better alignment of interests between long-term shareholders and managers who own stock-options than a classic dividend payment. This is due to the fact that the dividend payment will not lead to an adjustment in the strike price. In contrast, if the firm decides to repay shareholders through a share repurchase program—which would result in a share price rise—the resulting rise in share price will benefit executive stock-option holders (through an increase of value of their stock-options) as well as long-term shareholders (through an increase of value of their shares and their L-warrants). This is thus another way of aligning the interest of managers with those of long-term investors.

IV.4 Loyalty Shares and Market Liquidity

One concern with a Loyalty-share program is that the greater incentives for shareholders to stop trading their shares during the loyalty period might lead to a reduced underlying liquidity in the secondary market. However, against this reward to buy-and-hold shareholders, there are two important countervailing effects that mitigate this concern.

First, dynamic hedging of the warrants by traders would increase liquidity of the underlying stock in proportion to their delta neutral adjustments. That is, once the L-warrants vest and are tradable, or in anticipation of the vesting of the warrants, liquidity is generated by the traders of the warrants who will seek to hedge their option position by holding an offsetting replicating portfolio, which combines proportions of debt and the underlying stock. Second, the warrants only have real value if the underlying share price increases. Therefore, the potential reduction in liquidity would only occur in the event of an increase in share price, that is, when this is not too much of a problem.

Electronic copy available at: https://ssrn.com/abstract=2188661

IV.5 Stock Price Volatility, Short-selling and the Costs of Borrowing Shares

If secondary-market liquidity is affected by the introduction of L-shares then so must be volatility. The effects of L-shares on volatility could depend on the time window: whether the L-shares are in the loyalty period or in the exercise period.

During the Exercise Period, L-shares ought to reduce volatility, as some long-term shareholders may sell their warrants to traders who, as explained above, are likely to manage the option in a delta neutral way (which involves taking counter-cyclical hedging positions). By doing so, traders will automatically contribute to a reduction in volatility.

During the Loyalty Period, the presence of L-shares should tend to slightly increase volatility. The reason is that some long-term investors (main actors in the share lending market) by lending their shares during the loyalty period will lose the right to the L-warrant, as a loan would count as a transfer of ownership. Therefore, to obtain a loan of a share from a long-term investor the borrower will either have to deliver the value of the L-warrants to their counterparties or to "manage the options", and therefore have a negative gamma position (requiring a counter-cyclical hedging position)[17]. Note, in particular, that in this respect L-shares discourage short-selling as they increase the cost of borrowing shares.

V] PRICING LOYALTY-SHARES

Even though there is no precedent for the valuation of this instrument, the pricing of L-shares ought to be straightforward as there exist similar instruments, such as executive stock-options that vest only after a pre-specified period of time, that are routinely priced. Drawing an analogy with these options, the approach to valuation of an L-warrant could be that the L-warrant is worth the same as a classic warrant multiplied by the probability that the warrant vests at the end of the loyalty period. Thus, a valuation formula along the following lines may be appropriate:

17 At the opposite long term investors could think about monetizing their positions. But that would lead to operational issues (authorizations for OTC products, counterparty risk,…) and therefore reduce that impact.

Electronic copy available at: https://ssrn.com/abstract=2188661

Fair value L-warrant = Call Option Model[18] * [*Stable Capital*/Total Float + *Turnover Capital*/Total Float* Max [100%-(Turnover Capital annual Roll-Over * Loyalty Period), 0]]

Where:

- *Turnover Capital*: is the estimated share of equity owned by short-term investors;
- *Stable Capital*: is the estimated share of equity owned by loyal shareholders;
- Total Float: is the total number of outstanding shares.

This pricing is similar to the one for executive stock-options in the sense that it takes into account at inception an estimate of the future behavior of shareholders (loyalty for the L-shares and turn-over before stock-options vest for executives).

With respect to L-shares, there may also be an interesting potential novel factor related to the correlation between the volatility of the underlying stock and the turnover of share ownership: the higher the volatility, the higher the turnover is likely to be. Therefore, in contrast to the classical positive effect of volatility on option value, a loyalty-warrant's pre-vesting value could conceivably be lower for volatile stocks. A more sophisticated pricing of L-shares, may also allow for the L-warrant price to go down if the share price goes down, as L-share owners are then more likely to sell their L-shares. The L-warrant would then be akin to a so-called *down-and-out* call-option. In sum, although there would be no secondary market for L-warrants during the loyalty period, the valuation of these warrants can nevertheless be done using pricing methods similar to those applied to value executive stock-options, which are also not traded (see e.g. Hull and White, 2004).

VI] IMPLEMENTING LOYALTY-SHARES

There are a number of important institutional and contractual issues with the implementation of L-shares, such as the tracking of shareholder loyalty, the accounting treatment of L-warrants, tax implications, corporate governance considerations, etc., which we address in this section.

18 With Call Option Model (vesting + maturity, spot, strike, dividend yield, interest rates, implied volatility)

Electronic copy available at: https://ssrn.com/abstract=2188661

VI.1 Accounting treatment of L-Shares

As with any new financial instrument, L-shares obviously do not have a well-defined accounting treatment. Still, reasoning by analogy one may argue that grants of L-warrants are similar to dividend payments out of reported earnings, and as such should therefore not affect the income statement. Thus, consistent with both US GAAP and with IFRS, the attribution of an L-share should have no impact on reported earnings per share.

Moreover, under both US GAAP and IFRS, L-shares could be booked as equity instruments. It is likely that L-shares would be booked as IAS32 equity instruments under IFRS because the strike price and the number of underlying shares, which will be physically delivered, are both fixed. According to paragraph 16 of IAS32, the derivative should "be settled only by the issuer exchanging a fixed amount of cash or another financial asset for a fixed number of its own equity instruments" to be recognized as an equity instrument. Failing these requirements could be detrimental, as L-shares would be considered as liability derivative instruments and thus would have to be re-valued at each reporting date, which would impact the income statement. Furthermore, L-shares also meet US GAAP equity instruments criteria: the strike price and the number of underlying shares are both fixed (ASC 815-40-15-7C), and there is no cash settlement alternative (ASC 815-40-25) since the underlying shares are already registered and the L Share contract is a free-standing contract (ASC 815-40-15).

VI.2 Tracking Loyalty

How can an issuer of L-shares verify that a shareholder is entitled to a L-warrant—when she held her shares throughout the loyalty period—and at the same time preserve the shareholder's anonymity? This is a key question, which fortunately has simple answers both in Europe and in the U.S.

In Europe, the first step is to attribute a new ISIN code to all the initial holders of L-shares (call it, say, the L-ISIN code). Those shareholders who hold on to their L-shares until the expiration of the loyalty period (who are identified by the L-ISIN number that has been attributed to them) would then receive the promised L-warrant. The second step is that the new shareholders, who acquire

Electronic copy available at: https://ssrn.com/abstract=2188661

shares from initial L-shareholders who sold their shares before the loyalty period is over, would be assigned a different ISIN number (the one that identifies underlying common shares) by the custodian of the L-shares. With the switch in ISIN code, the right to the L-warrant cannot be transferred, so that 'disloyal' shareholders would automatically lose their right to a L-warrant if they trade before the loyalty period has expired. With this mechanism the issuer would be able to track loyalty and reward the long-term investors without compromising shareholder anonymity[19].

Of course, companies such as *Air Liquide* for example, who ask their shareholders to become "registered shareholders" (either in a direct registry held by the company or in a street-name administered registry) can, of course, simply check the register to verify loyalty. But companies take the risk of dissuading ownership by a significant shareholder clientele that wish to preserve their anonymity.

From a U.S. perspective, the simplest way of tracking holding periods in order to identify loyal shareholders would be for the company to retain the services of a transfer agent that would act as the issuer's warrant agent. The retained transfer agent would maintain a register of warrant holders and would ensure that no transfers are effected until the end of the holding period, when the positions would be unblocked. Another approach might be to issue registered warrants where the warrants only become exercisable, and the underlying stock only becomes transferable, after a three-year holding period.

VI.3 Treatment of L-Shares in an M&A Transaction

A company may be affected by many events during the loyalty period, some of which may require adjustments to the basic terms of L-shares outlined above. In particular, we single out for discussion events that trigger major changes in ownership of the corporation: an acquisition, a takeover, or a bankruptcy. Consider first how L-shares ought to be adapted to an acquisition during the loyalty period. The key difficulty with an acquisition is that if the company is acquired through a friendly acquisition then the exchange of shares of the target company (for cash and/or for shares in the merged entity) is dictated by a shareholder vote. In this situation, the exchange is not an individual

19 It could be argued that the process marginally favors retail investors in the sense that an institutional investor who changes its fund manager might see its ISIN number modified and might thus imperil its loyalty warrants.

Electronic copy available at: https://ssrn.com/abstract=2188661

decision of a shareholder and cannot be attributed to any lack of loyalty towards the company. It therefore makes sense to adapt the terms of the loyalty share to account for the unusual circumstances leading to the trade in shares.

One possibility could be to accelerate the maturity of the loyalty period in the event of an acquisition offer on the company: then long-term shareholders would be able to exercise their L-warrants in advance of the acquisition. One advantage of this change in terms is that it puts all shareholders on an equal footing when deciding on the merits of the acquisition. Otherwise, long-term shareholders would have an incentive to vote against their company's acquisition in an effort to hold on to their promised warrants. Also, it eliminates any incentives by management to bring forward a merger deal in an effort to void the firm's obligations on its L-shares. One objection might be that the acceleration may have similar diluting effects to a poison pill. But, note that unlike with a poison pill the warrants in a L-share would vest in the absence of an acquisition and the loyalty-reward transfer from short-term to long-term shareholders has already been priced into the common stock price. Thus, the acceleration of the exercise date of the L-shares would only have a marginal diluting effect. Note also that a forced exchange of shares, which voids the company's promise of a loyalty reward to its long-term shareholders, would be a form of expropriation of L-shareholders. On net, it is therefore not obvious that the acceleration of the loyalty period will be a worse obstacle to an acquisition than the non-acceleration, which would result in long-term shareholder entrenchment.

In the event of a hostile takeover offer holders of L-shares will require a premium to tender their shares that would compensate them for the loss in their loyalty reward, should the exercise date not be accelerated. If, however, they are allowed to exercise their warrants prior to the tendering decision they would not require a premium, but the exercise of their warrants would involve some dilution costs for the acquirer. A third possibility is that L-shareholders do not tender their shares at all and the takeover succeeds thanks to a sufficient fraction of common stock being tendered. This outcome would involve identical dilution costs for the acquirer than paying a premium for the L-shares. In sum, while L-shares could give rise to some dilution costs for acquirers, they won't be of the same magnitude as a poison pill, simply because L-shares involve a transfer that is priced into common stock, which is not the case for poison pills that are designed so that they will never be

Electronic copy available at: https://ssrn.com/abstract=2188661

triggered.

VI.4 Treatment of L-Shares in Bankruptcy

What about the effects of a bankruptcy filing before the expiration of the loyalty period? To the extent that L-shares only commit the firm to issue more shares to loyal shareholders (at pre-specified terms through a warrant) it makes sense to simply merge long-term shareholders in the same pool as other common equity holders. Loyalty-shares do not put long-term shareholders ahead of other common shareholders in any way, so that there is no reason to classify them separately. Also, should equity holders be so lucky to emerge with some equity claims from bankruptcy then the bankruptcy filing would have neutral effects with respect to any change in ownership, so that there would be no need to change the terms of the loyalty share. The only issue concerning acceleration is whether it makes sense to grant more voting rights in bankruptcy to long-term shareholders. However, in this state of the world giving long-term shareholders more say is likely to have only a marginal impact.

VI.5 Voting Rights of L-Shareholders

This brings us to the issue of other rewards to long-term shareholders in terms of greater voting rights. Corporate governance is likely to be enhanced if more say is given to loyal shareholders, who care more about the long-term prospects of the corporation and are less likely to try to time equity markets to take advantage of a short-term speculative phase. It thus makes a lot of sense to also reward loyal shareholders with more control rights, as Dallas (2011) proposes[20]. Although we are not proposing rewards to long-term shareholders in terms of greater voting rights it is worth noting that even under the one-share-one vote terms we implicitly outlined above, loyal shareholders automatically stand to gain more control as they exercise their warrants.

The question then is whether it is desirable to give long-term shareholders even more control rights. Our view is that the answer depends on the type of long-term investor the company is able to attract. If it is a large actively engaged investor it could make sense to also grant that investor more voting rights. If, on the other hand, long-term investors remain largely passive there may not be

20 Lynne Dallas suggests stronger voting rights for long-term shareholders as high as "four votes per share rather than one vote per share for short-term shareholders". p 351, Dallas (2011).

Electronic copy available at: https://ssrn.com/abstract=2188661

much of a gain from also giving them more voting rights.

VI.6 Disclosure Requirements for L-Shares

Given that Loyalty-shares grant warrants at the expiration of a loyalty period that in all other respects are like ordinary warrants it makes sense to treat these warrants the same way as ordinary warrants in terms of disclosure. On the other hand, if the L-shares are granted in a restricted offer to a strategic investor then disclosure of the owner's identity and stake would be required as soon as the owner's stake exceeds the 5% ownership threshold.

VI.7 Tax Treatment

There is only a special tax event if the warrant is granted at the end of the loyalty period and exercised. Otherwise there should be no tax deduction in the event that the warrant is not granted or exercised. The taxable capital gain on the shares from the exercise of the warrants should be the difference between the price at which the share is sold and the strike price. More specifically, under French tax law we could argue that the standard capital gain tax treatment should apply when the L-warrant is sold. For an individual investor this would currently mean that a tax rate of 18% plus a rate of 12.1% towards social contributions would be applied to the realized capital gain. For corporations, realized capital gains on the sale of L-shares would simply be consolidated into corporate earnings and as such be taxable at the standard corporate tax rate of 33.3% currently. But corporations could also benefit from a favorable tax treatment for *long-term capital gains* if: (i) the shares represent at least 5% of the firm's equity and 5% of the voting rights; (ii) the shares are held for at least 2 years; and (iii) the shares are registered in a so-called "participation" account. If all these conditions are met then the relevant tax rate that is applied to the capital gain on L-shares is only about 1.65%.

Although there is no specific U.S. tax precedent, the investor might not recognize gross income for federal income tax purposes when the Warrant detaches after the Loyalty Period. Instead, the investor may allocate its tax basis in the L-share between the Warrant and the common share according to their relative fair market values at that time. If the Warrant subsequently expires, the investor would have a capital loss equal to its tax basis in the Warrant. If the Warrant is subsequently exercised, the investor would add the Warrant's tax basis to its basis in the common

Electronic copy available at: https://ssrn.com/abstract=2188661

stock acquired

VI.8 Corporate Law Issues

Under French Law, specifically under article L. 232-14 of the *Code de Commerce* a company can grant loyalty dividend (*dividende majoré*) or additional voting rights subject to shareholders holding their shares for a two-year holding period. The issuance of a L-Warrant may be implemented under article L. 228-91 and following of the French Commercial Code for general warrants issuance. The decision to issue securities providing access to the capital of the firm is made at the shareholder meeting (article L. 228-92). The specific issuance modalities are delegated to the Board of directors, which may ultimately decide to issue L-shares. The French Commercial Code also provides (article L.228-46) that a special entity, with a civil personality, be created to protect the rights of the warrant holders ("masse des porteurs"). This entity would decide on the way forward if the conditions of subscription are modified.

Under Delaware corporate law, L-shares could be issued through a subscription rights offering. All stockholders would be entitled to subscribe, for a de minimis amount (at least equal to the par value of the company's common stock), for warrants that would become exercisable and transferable only upon satisfaction of the requisite holding period. The company's board of directors would have to determine that there was a valid business purpose or benefit for the company's stockholders as a result of undertaking the rights offering. The company would have to comply with the rules and regulations applicable to listed companies in connection with a rights offering, such as the requirement to publicly announce a record date (date by which an investor must possess stocks to be eligible to a warrant), and also prepare and file with the Securities and Exchange Commission a registration statement covering the warrants and the underlying shares represented by the subscription rights.

Finally, both the American and European legal analysis show that shareholders' approval to issue L-shares is likely to be needed. Thus, a proxy statement should be prepared in order to seek stockholder approval. However, in most countries the legal status of L-shares has not been defined explicitly.

Electronic copy available at: https://ssrn.com/abstract=2188661

Several of the key corporate law issues raised by L-shares have recently been considered in a Dutch case involving *Royal DSM NV* and some of its shareholders, who objected to the company's plan to issue a *loyalty dividend*. These issues include: possible violations of the principle of equal treatment of shareholders, and whether to require a shareholder vote on the decision to grant L-shares.

Equal treatment of shareholders

Consider first the issue of equal treatment of shareholders. As the plaintiffs in the *Royal DSM NV* case have argued, one concern could be that L-shares or any similar mechanisms might violate the principle of equal treatment of shareholders. We believe that this is debatable for two main reasons. First, as we have outlined, L-shares could be offered to all shareholders on an equal basis. Every shareholder then has the same opportunity to acquire L-warrants on the same terms. Second, L-warrants are obtained by holding shares for a specified period of time, starting at the moment a share is sold to, or issued to, a shareholder. There is then no discrimination among shareholders, and access to L-warrants only depends on the shareholders' behavior during the loyalty period, which, again, is the same for all shareholders. In other words, all shareholders can be given equal chance to get a L-warrant.

Interestingly, the Supreme Court of the Netherlands reversed the Amsterdam Court of Appeals' decision to ban *Royal DSM*'s proposed loyalty dividend, by referring to the French statutes and arguing that the principle of *equal treatment of shareholders is only a means to an end*: the maximization of enterprise value. To the extent that maximization of enterprise value may be achieved by deviating from the strict adherence to shareholder equality, such a deviation is permissible.

Shareholder vote

A shareholder vote to grant L-shares would be necessary if the granting of L-shares requires a modification of the company's charter documents. Otherwise, the distribution of L-warrants should be treated the same way as a dividend payment or a classic equity issuance.

VI.9 Decoupling and Arbitrage

Electronic copy available at: https://ssrn.com/abstract=2188661

A natural question concerning L-shares is whether holders of the shares may be able to undo or 'decouple' the right to a L-warrant from the loyalty holding-obligation (this questions is crucial to determine the freestanding nature of the L-share contract and thus the accounting nature of the instrument, see above). And if so, whether their ability to arbitrage the L-shares defeats the purpose of L-shares altogether. Conceivably, holders of L-shares might be able to trade their shares forward, after the expiration of the loyalty period, and thus collect the L-warrant while still being able to cash in on their stick sale before the expiration of the loyalty period. Alternatively, an intermediary—such as a closed-end fund specializing in L-shares—might hold the L-shares, while allowing investors to engage in unrestricted secondary-market trades in the intermediary's stock. Would these schemes undo L-shares altogether?

Note first that forward trades in L-shares are unlikely as the counterparty of the forward trade would probably have to borrow the shares for hedging purposes[21] (and the shares are likely to be borrowed from some long term investors asking for the value of the warrant to lend them). Second, these trades would also involve a counterparty risk, which would inevitably be reflected in the forward or derivative price and would consequently discourage such trades. As for setting up an intermediary fund (to take uniquely advantage of the L-Warrant), note that this would result either in a small fund (e.g. owning 2% of the firm's assets) with reduced liquidity, or in a large fund (e.g. 20% of the firm's assets) with high operational cost for a limited gain.

VI.10 Communication around the issuance of L-Shares

The distribution of L-Shares obviously requires careful communication with investors.
L'Oréal for instance has mentioned on its institutional website that a preferential dividend of +10% has been offered to all holders of registered shares for at least two years. L'Oréal has justified the implementation of the loyalty dividend by explaining that it enables the company to get to know its shareholders better. *Lafarge*, another French company using loyalty dividends has also communicated on its institutional website its "loyalty bonuses" are reward to loyal investors.

21 However this may not hold anymore during the end of the loyalty period (e. g. 3 months before maturity), since short-term investors would lend their shares as well. Also long-term investors who are subject to a unfavorable tax treatment on dividends are likely to lend their shares, and will hold them only if the warrant compensates for the fiscal disadvantage.

Electronic copy available at: https://ssrn.com/abstract=2188661

VII] COMPARISON BETWEEN DIFFERENT TYPES OF REWARDS FOR LOYALTY

How do loyalty-rewards in the form of L-warrants compare with other observed types of rewards, such as *loyalty dividends*? At some level the nature of the reward is of secondary importance relative to the existence of a reward. Still we believe that L-warrants are likely to be better instruments as they are more flexible.

Relative to simply granting additional shares at the expiration of the loyalty period, L-warrants have a first added benefit of allowing the firm to take advantage of a leverage/insurance effect (disproportionately rewarding long-term investors in the most profitable states of the world).

Second, L-warrants also increase in value when the underlying stock is more volatile, thus providing a higher reward to long-term investors in more turbulent times[22], when a loyal shareholder base is more valuable to the firm. Third, L-warrants are out-of-the money when the firm continues to do badly and its share price declines. In that event, holders of L-shares have little incentive to hold on to their shares until expiration of the loyalty period, so that a change in control is easier to achieve for an activist shareholder buying shares in the secondary market.

Relative to rewarding long-term investors with additional voting rights, we also believe that L-warrants may be preferable as long-term investors are not always using their voting rights (in contrast to more short-term activist hedge funds). It is therefore not obvious that more voting rights constitute a real incentive for long-term investors.

Relative to rewarding long-term investors with a special dividend, as in the case of *L'Oreal*, the benefit of L-warrants is that they do not tend to depress the stock price to the same extent as the special dividend, thus better helping align the long-term objectives of the CEO with the long-term objectives of L-shareholders. Moreover in the French legal framework, payment of special dividends is limited: additional dividends may not exceed 10% of dividends, and are limited to a maximum of

22 Note that this value can however not be monetized. This is also the case for Loyalty dividends.

Electronic copy available at: https://ssrn.com/abstract=2188661

0.5% of the company's shares per shareholder[23].

Relative to a tax treatment in favor of long-term investors at the market level, the L-shares act as a tax at the firm level, so that investors cannot circumvent it (see Table B and Appendix II).

VIII] CONCLUSION

As more and more commentators are arguing, there is a greater need than ever of counteracting the short-termist outlook of modern financial markets. Continuous electronic trading platforms, computer trading algorithms, the growth of day-trading, have all contributed to accelerating the response of speculative investors to news and to increasing the returns to short-term speculative activities. What has suffered as a consequence is long-term investing focused on an evaluation of the long-term fundamental value of a firm.

Loyalty-shares provide in our view a simple contractual innovation that helps restore the balance between long-term investors and short-term speculators. They allow issuers to discriminate between long-term and short-term investors and to reward those shareholders that are most loyal to the company. At the same time loyalty-shares do not require firms to make radical financing and corporate governance changes. They offer a simple correction towards a more long-term fundamental value outlook, which can be scaled up at will by the corporation. But, their introduction will not disrupt the functioning of secondary markets or undermine stock market liquidity.

There is also a growing long-term oriented investor constituency comprising pension funds, employee stock-ownership plans, and sovereign wealth funds, which would be a natural investor clientele for L-shares. We therefore believe that these are propitious times for this simple innovation, as both the need for a more long-term management reorientation, and the demand for long-term investment products has never been greater.

23 French Law "Loi no 94-578 du 12 juillet 1994".

Electronic copy available at: https://ssrn.com/abstract=2188661

REFERENCES

Alti, Aydogan and Paul C. Tetlock, 2012, "Biased Beliefs, Asset Prices, and Investment: A Structural Approach" (June 2012), Working Paper.

Aspen Institute, 2009, "Overcoming Short-termism: A Call for a More Responsible Approach to Investment and Business Management".

Bachelder, Joseph E. III, 2012, "Institutional Shareholders and Their 'Oversight' of Executive Compensation", *The Harvard Law School Forum on Corporate Governance and Financial Regulation* (July 2012).

Barsky, Robert B., and J. Bradford DeLong, 1993, "Why Does the Stock Market Fluctuate?" *Quarterly Journal of Economics*, 108:2 (May 1993): 291-312.

Barton, Dominic, 2011, "Capitalism for the Long Term", *Harvard Business Review*, issue 89 (March): 54-89.

Blood, David and Al Gore, 2012, "Sustainable Capitalism", Generation Investment Management LLP white paper.

Bogle, John C., 2010, "Restoring Faith in Financial Markets", *Wall Street Journal* (Jan. 18, 2010).

Bolton, Patrick, José Scheinkman and Wei Xiong, 2006, "Pay for Short-Term Performance: Executive Compensation in Speculative Markets", *The Journal of Corporation Law,* 30(4), 721-748.

Bolton, Patrick and Ernst-Ludwig Von Thadden, 1998, "Blocks, Liquidity and Corporate Control", *Journal of Finance*, Vol. 53, No. 1: 1-25.

Booz & Co, 2010, "CEO Succession 2000-2009: A Decade of Convergence and Compression", *strategy+business* issue 59.

Brav, Alon, Wei Jiang, Frank Partnoy and Randall S. Thomas, 2008, "The Returns to Hedge Fund Activism", *Journal of Finance*, LXIII, 4: 1729-1755.

Brochet, François, Maria Loumioti and George Serafeim, 2012, "Short-Termism, Investor Clientele, and Firm Risk", Harvard Business School Working Paper.

Cheng, Ing-Haw, Harrison Hong, Jose A. Scheinkman, 2012, "Yesterday's Heroes: Compensation and Creative Risk-Taking", Working Paper.

Coffee, John C., 1991, "Liquidity versus control: the institutional investor as corporate monitor", *Columbia Law Review* 91:1277−1366.

Electronic copy available at: https://ssrn.com/abstract=2188661

Dallas, Lynne, 2011, "Short-Termism, the Financial Crisis, and Corporate Governance", *Journal of Corporation Law*, Vol. 37: 264.

Eccles, Robert G., Ioannis Ioannou and George Serafeim, 2011, "The impact of a Corporate Culture of Sustainability on Corporate Behavior and Performance", Harvard Business School Working Paper.

Fama, Eugene F., 1970, "Efficient Capital Markets: A Review of Theory and Empirical Work", *Journal of Finance*, Vol. 25, No. 2: 383-417.

Franks, Julian R., and Colin Mayer, 1995, "Ownership and control", in: H. Siebert, ed., *Trends In Business Organization: Do Participation and Cooperation Increase Competitiveness?* (J. C. B. Mohr, Tübingen, Germany), Pp. viii, 292. DM 108.

Fuster, Andreas, Benjamin Hebert, and David Laibson, 2011, "Investment Dynamics with Natural Expectations", *International Journal of Central Banking (Special Issue in Honor of Benjamin Friedman)* 8(1): 243-265.

Gabaix, Xavier and Augustin Landier, 2008, "Why Has CEO Pay Increased So Much?" , *Quarterly Journal of Economics*, 49-100.

Gordon, Jeffrey N., 2007, "The Rise of Independent Directors in the United States, 1950-2005: Of Shareholder Value and Stock Market Prices", *Stanford Law Review*, 59: 1465-1568.

Graham, Benjamin, *The Intelligent Investor,* 1954 Edition.

Graham, John R., Cam Harvey and Shiva Rajgopal, 2005, "The Economic Implications of Corporate Financial Reporting", *Journal of Accounting and Economics* 40, 3-73.

Harrison, Michael J. and David M. Kreps, 1978, "Speculative Investor Behavior in a Stock market with Heterogeneous Expectations", *Quarterly Journal of Economics*, Vol. 92, No. 2: 323-336.

Hennesse Group LLC, 2003, "Comments of Hennessee Group LLC fo the US Securities and Exchange Commission Roundtable on Hedge Funds".

Hermes Investment Management Limited, 2011, "Position Paper: Hermes' approach to loyalty dividends".

Hirshleifer, David A. and Jianfeng Yu, 2012, "Asset Pricing in Production Economies with Extrapolative Expectations", *AFA 2012 Chicago Meeting Paper* (September 4, 2012).

Hull, John and Alan White, 2004, "How to Value Employee Stock-Options", *Financial Analysts Journal*, Vol. 60, No. 1: 114-119.

Holmstrom, Bengt and Jean Tirole, 1993, "Market Liquidity and Performance Monitoring", *Journal of*

Electronic copy available at: https://ssrn.com/abstract=2188661

Political Economy, Vol. 101, No. 4: 678-709.

Jacobs, Jack B., 2011, "Patient Capital: Can Delaware Corporate Law Help Revive It?", *Washington and Lee Law Review*, Vol. 68, Iss. 4, Art. 2.

Jensen, Michael and Kevin J. Murphy, 1990, "Performance Pay and Top-Management Incentives", *Journal of Political Economy*, Vol. 98, No. 2: 225-264.

Kay, John, 2012, "The Kay Review of UK Equity Markets and Long-Term Decision Making", July 2012.

Laux, Volker, 2012, "Stock Option Vesting Conditions, CEO Turnover, and Myopic Investment", *Journal of Financial Economics*, Vol. 106, Iss. 3 (Dec. 2012): 513-526.

Levisohn, Ben, 2010, "The Decline of the P/E Ratio", *Wall Street Journal* (Aug. 30, 2010).

Lewis, Michael, 2002, "In defense of the boom", *New York Times Magazine* (27 October 2002).

Murphy, Kevin J., 1999, "Executive Compensation", *Handbook of Labor Economics*, Volume 3, Part 2: 2485-2563, Elsevier.

Petajisto, Antti, 2010, " Active Share and Mutual Fund Performance" New York University Working Paper.

Roe, Mark J., 1994, *Strong Managers, Weak Owners: The Political Roots of American Corporate Finance,* Princeton University Press, Princeton, NJ.

Scheinkman, José A. and Wei Xiong, 2003, "Overconfidence and Speculative Bubbles", *Journal of Political Economy*, Vol. 111, No. 6: 1183-1219.

Shiller, Robert J., 1981, "Do Stock Prices Move Too Much to be Justified by Subsequent Changes in Dividends", *The American Economic Review*, Vol. 71, No. 3 (Jun., 1981), pp 421-436.

Soter, Dennis and Paul Evanson, 1996, "The Dividend Cut 'Heard Round the World': The case of FPL", *Journal of Applied Corporate Finance,* Vol. 9, 4-15.

Stiglitz, Joseph E., 2010, *Freefall: America, Free Markets, and the Sinking of the World Economy*, W. W. Norton & Company, Preface p. xiv.

Strine, Leo E., 2010, "One Fundamental Corporate Governance Question We Face: Can Corporations Be Managed for the Long Term Unless Their Powerful Electorates Also Act and Think Long Term?", *The Business Lawyer*, Vol. 66, November.

Electronic copy available at: https://ssrn.com/abstract=2188661

APPENDIX

I] Shortening of Average Holding Period of Stocks

The dramatic shortening of the average holding period observed for U.S. stocks led to historically high turnover figures. For 2011, the turnover figures presented by the NYSE showed that the year-to-date annualized turnover was, for each and every month, higher than 80%.

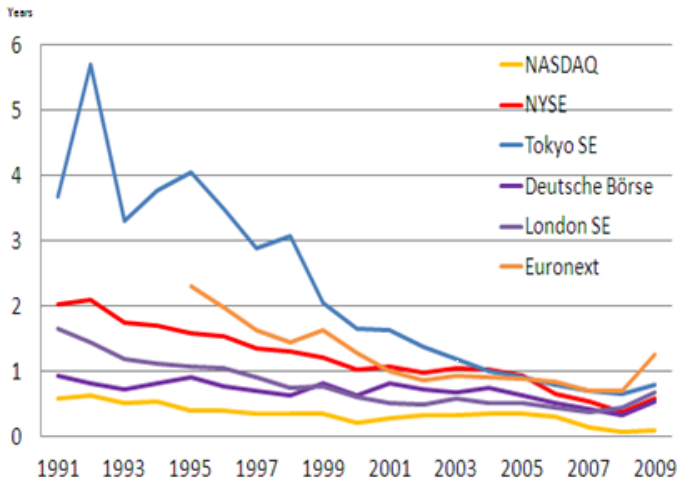
NYSE Group Turnover, 2011

Month	NYSE Group Annualized Monthly Turnover	NYSE Group Year to Date Annualized Turnover
January	90%	90%
February	84%	87%
March	82%	85%
April	72%	82%
May	78%	81%
June	83%	82%
July	79%	81%
August	122%	87%
September	90%	87%
October	87%	87%
November	84%	87%
December	73%	86%

Source: NYSE Group Turnover

This trend is global and all major Exchanges are concerned. Calculated roughly as the ratio of the average of the total market value of the shares outstanding at the start and at the end of the year and the value of shares traded in any given year (as an adaptation of Haldane 2011), the average holding period was globally less than one year in 2008 and the average holding period has considerably decreased in every major Exchange.

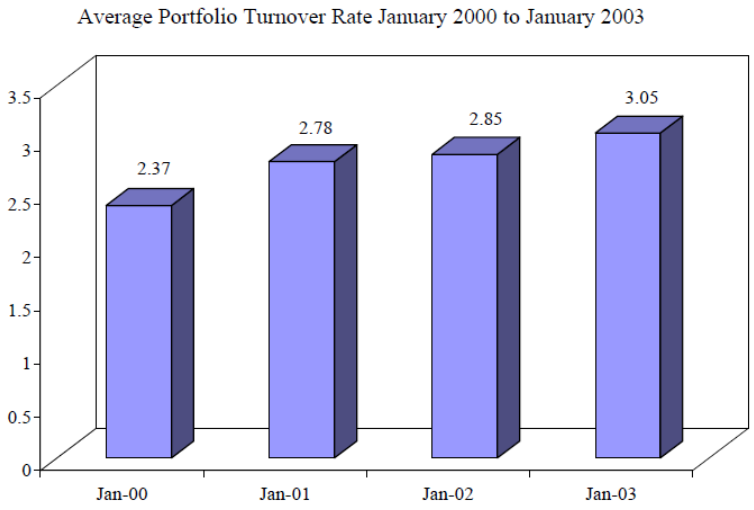
Electronic copy available at: https://ssrn.com/abstract=2188661



Source: World Federation of Exchanges

This measure of short-termism might be distorted by the rapid rise of high frequency trading (HTF) in the mid -2000s as HFT firms are believed to account for a significant part of all trading volume. Note, however, that the average holding period had already fallen below one year in the early 2000s, so that this measure still suggests a dramatic shortening of stock holding periods for the typical shareholder.

Unsurprisingly, Hedge Funds present the highest turnover, an average Hedge Fund Manager turns its portfolio over three times a year (300% turnover). Moreover, the average turnover of a Hedge Fund is also increasing: a 2004 Hennessee Report on Hedge Funds reveals a 30 percent increase since 1999.



Source: Hennessee Group LLC

Electronic copy available at: https://ssrn.com/abstract=2188661

II] Comparison of the Different Solutions to Reward Loyalty

	Extra Share	Extra Voting Right	Extra Dividend	L-Warrants
Impact on Liquidity	Limited and only if stock price increases	Constant & Limited	Constant & Limited	Limited and only if stock price increases [1]
Impact on Volatility	No	No	No	Potentially reduces it after loyalty period
Impact on Share Borrowing Cost	Limited and only if stock price increases	Limited	Limited	Limited and only if stock price increases
Better alignment with management [2]	Limited	No	No	Yes

[1] And potentially increases it after loyalty period
[2] Assuming the management is entitled to stock options

Electronic copy available at: https://ssrn.com/abstract=2188661

european corporate governance institute

About ECGI

ECGI is an international non-profit membership organisation that provides a platform for debate and dialogue among academics, policymakers, and business leaders, with a focus on major corporate governance, ESG, and stewardship issues.

The views expressed in this working paper are those of the authors, not those of the ECGI or its members.

www.ecgi.global

european corporate governance institute

ECGI Working Paper Series in Finance

Editorial Board

Editor	**Nadya Malenko,** Professor of Finance, Boston College
Consulting Editors	**Renée Adams,** Professor of Finance, University of Oxford
	Franklin Allen, Professor of Finance and Economics, Imperial London
	Julian Franks, Professor of Finance, London Business School
	Mireia Giné, Professor of Finance, IESE Business School
	Marco Pagano, Professor of Economics, Facoltà di Economia Università di Napoli Federico II
Series Manager	**Asif Malik**, ECGI Working Paper Series Manager

https://www.ecgi.global/publications/working-papers