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Loyalty-Shares: Rewarding Long-term Investors

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Loyalty-Shares: Rewarding Long-term Investors¹

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Financial policy makers, regulators, academics, and other market observers have long expressed concern that, particularly in capital market-driven economies like the U.S. and U.K., excessive focus on quarterly earnings and short-term stock price has led to corporate underinvestment—and, as a result of such underinvestment, disappointing growth in GDP and jobs. Many observers identify the culprit as speculative behavior in stock markets, which generally focuses on short-term stock-price movements. Such speculators generally try to anticipate and profit from changes in *market sentiment*, or investors' collective psychology; and as a consequence, their activities have almost nothing to do with any effort to discover the long-term fundamental value of the companies they invest in. And given the recent advances in information technology that have made possible even higher frequency stock trading, the concern that equity markets are imposing ever greater pressures for short-term performance on corporate executives may well be at an all-time high.

Following the financial crisis of 2007-09, there have been some efforts to address this problem of corporate short-termism by lengthening the vesting periods for executive stock options and by introducing clawback provisions, mainly in the financial sector. But these efforts are likely to meet with only moderate success if corporate managers believe that their shareholders remain focused primarily on short-term performance. Even in cases where their stock options vest two or three years after they have been granted, many CEOs remain unduly concerned about quarterly performance, since they know they can be dismissed long before their options vest if shareholders are unhappy with their reported quarterly performance. As a result, many CEOs continue to boost short-term earnings at the expense of long-run value maximization.

It is worth emphasizing that CEO short-termism is not necessarily the result of a governance failure, but also afflicts otherwise well-governed companies whose compensation plans

effectively reward their CEOs for meeting the short-term objectives of their shareholders.² One shareholder constituency that is widely believed to have such short-term biases is the institutional investor community—a group that comprises mutual funds and pension funds, and whose collective holdings are said to account for the ownership of some 60-70% of publicly traded stocks. To the extent that the managers of such funds are rewarded directly or indirectly (through money flows in and out of the funds they manage) for meeting market index performance benchmarks over the short run, their buying and selling activity could be accentuating the market's response to quarterly earnings reports.³ At the same time, a growing proportion of institutional investors are adopting passive asset-class-allocation investment strategies that, by definition, make no attempt to distinguish good performers from bad.

All in all, then, the reality of financial markets today is that only a small minority—by most estimates, no more than about 10%—of institutional shareholders care about long-run performance and are informed about any individual company's fundamental long-term value.⁴ This is not, of course, to deny the existence and remarkable success of fundamentals-based “value” investors such as Warren Buffett, Michael Steinhardt, and Bruce Greenwald. But the consistently high returns earned by such investors may in fact be evidence of the problem. That is to say, the propensity of shorter-term, less-informed investors to “trade” on earnings report may well be creating buying (or selling) opportunities for more sophisticated investors with considerable track records and staying power.

What are the consequences of this possible increase in the stock market's focus on short-term results? In a nutshell: at the corporate level, it is likely to mean missed investment opportunities, and more timid strategic planning, and less innovation. As reported in a much cited survey of corporate CFOs,⁵ when it comes to managing reported earnings in an effort to keep their company's stock price high, the CFOs

1. We are grateful to Don Chew (the editor) for very helpful and detailed comments. We also thank Dominic Barton, Marco Becht, Pascal Blanqué, William Bratton, Robert Eccles, Ron Gilson, Edward Greene, Denis Gromb, Laure Guegan, Roger Guesnerie, Huang Haizhou, Olivier Hubert, Jin Liqun, Peter Knight, Jacques de Larosière, Stefan Lundbergh, Ira Millstein, Yves Perrier, Anna Pinedo, Augustin de Romanet, Howard Rosenthal, Judith Samuelson, Joseph Stiglitz, Ernst-Ludwig Von Thadden, James Wolfensohn, and Jason Zweig, for many helpful comments. We are grateful to Alice Balagué, Elina Berrebi, 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.

2. See, for example, Cheng, Hong and Scheinkman (2010), and Becht, Bolton and Roell (2011).

3. See e.g. Chevalier and Ellison (1999) and Vayanos and Woolley (2008).

4. See Bushee, “Identifying the Right Kind of Investors,” *JACF*, Fall 2004.

5. Graham, Harvey and Rajgopal (2005).

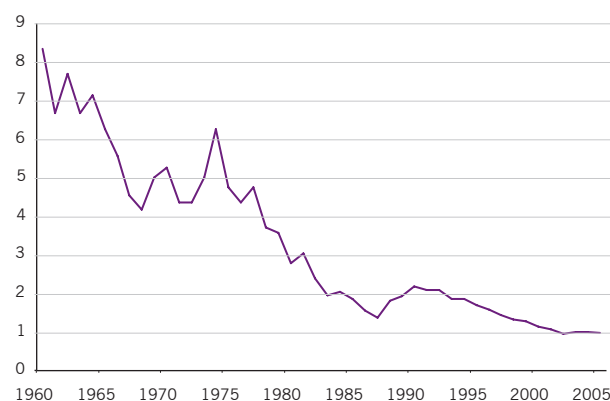
Box 1: Average Holding Period

- 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 the U.S. (this trend is global and every major Exchange is concerned).

- This measure of short-termism might be distorted by the rapid rise of high frequency trading (HFT) 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 two years in the mid-80s, so that this measure still suggests a dramatic shortening of stock holding periods for the typical shareholder. A survey by Mercer and the IRRIC Institute (2010) focusing on long-only equity strategies shows that nearly two-thirds of the 900 strategies studied had a turnover higher than expected, with some strategies recording more than 150-200% higher turnover than anticipated. The average annual turnover of the sample was 72% (which equates to an average holding period of 16.6 months). This

is figure is similar to the findings by Cremers, Pareek and Sautner (2012), who have identified a 20 months holding period for pension funds and endowments (that is significantly less than for long-term investors like Berkshire Hathaway, with a 48-month average holding period).

Average Holding Period for a Stock on the NYSE (years)



expressed their willingness not just to resort to misleading (though generally legal) accounting practices, but also to forgo promising investment opportunities that, although expected to increase the long-run fundamental value of the firm, would have reduced the next quarter's earnings. According to the survey, 78% of managers said they "would give up economic value in exchange for smooth earnings" and 55% of managers "would avoid initiating a very positive NPV project if it meant falling short of the current quarter's consensus."

Consistent with this survey evidence, a recent study that compares the investment behavior of listed and unlisted U.S. companies with otherwise similar characteristics finds that listed companies appear to be less responsive to new investment opportunities than their unlisted counterparts, and thus may well be underinvesting.⁶ The study relies on a new data set of unlisted U.S. companies by Sageworks Inc. and matches private firms in Sageworks to listed firms in the same industry and of similar size in Compustat. Although the study's main finding is that public companies invest less, and appear to be less responsive to changes in investment opportunities, than their private company counterparts, the authors also provide

evidence that the public companies with the least responsive investment policies are also those whose stock prices are most sensitive to reported earnings.⁷

Research has also shown that some companies have larger percentages of short-term investors than others. In an article published in this journal almost ten years ago called, "Identifying and Attracting the 'Right' Investors: Evidence on the Behavior of Institutional Investors," Brian Bushee used just two variables—the number of stocks in the portfolio and the average duration of holdings—as a basis for assigning all institutional investors into one of three categories: (1) "transients," or "momentum" investors, which exhibit high portfolio turnover and own small stakes in lots of portfolio companies; (2) "dedicated" institutions, which provide stable ownership and take large positions in individual firms; and (3) "quasi-indexers," which also trade infrequently but own small stakes (similar to an index strategy). The bad news from Bushee's study is that roughly 60% of U.S. institutions were classified as "transients," while just 10% were "dedicated" holders, with the remaining 30% exhibiting the behavior of passive indexers, or quasi-indexers. And the behavior of the shareholders appeared

6. Asker, Farre-Mensa, and Ljungqvist (2013).

7. Another recent study using a different methodology by Alti and Tetlock (2013) also finds strong evidence of overconfidence (i.e. investor overreaction to some pieces of news) and extrapolation biases (that is, investor underestimation of underlying mean-

reversion patterns of stock prices) in financial markets, which give rise to corporate investment distortions.

to have an effect on both stock price volatility and the behavior of the managers. As Bushee hypothesized, the disproportionate presence of transient institutions in a company's investor base appears to intensify pressure for short-term performance—with the managers of such companies showing a significantly greater willingness to cut R&D to meet a quarterly earnings target—while also resulting in excess volatility in the stock price. The good news from Bushee's study, however, is that some 40% of U.S. institutional investors are long-term holders—and that the disproportionate presence of such quasi-indexers and dedicated institutions in a company's investor base is associated with lower stock price volatility.

Finally, consistent with Bushee's finding, a recent study reported that companies with a more short-term investor base (as revealed from conference call transcripts with analysts and investors) tend to have higher equity betas. The authors suggest that the higher equity betas can be explained by companies being pressured to take more leverage in an attempt to meet the market's unrealistically high earnings growth expectations.⁸

To be sure, not all companies are saddled with short-term investors and not all companies are at risk of underinvesting. For some companies (often the primary targets of LBOs) the main problem is if anything the opposite—one of being too slow to divest unprofitable operations. These companies are obviously not in need of a more long-term shareholder base. But for many companies with good investment opportunities that are under pressure to meet the short-term performance targets of their shareholder base, a relaxation of this constraint could bring substantial benefits.

To the extent that the managements of publicly traded companies with lots of valuable investment opportunities are yielding to the pressures of equity markets for near-term earnings, what can be done to limit those pressures? The reactions of policy makers and commentators to the accumulating evidence of market short-termism have ranged from outright denial (all the evidence can be reconciled with the efficient market hypothesis), to benevolent skepticism (there are both instances of "short-termism" and "long-termism," meaning that the market "overvalues" the long-term prospects of some firms), to calls for radical action to curb the excesses of financial market speculation (such as increasing capital-gains taxation on realized short-term capital gains, or introducing a financial transactions tax). Our view is that short-termism of financial markets is a major concern, at least for certain kinds of companies, but that solutions to correct this bias should not be seen only in terms of regulatory intervention. The market itself has an important role to play in encouraging contractual solutions to short-termism where they are most needed. We also believe that while the disease and its origins are now better understood, determining which are the most cost-effective cures (that is, those that are less costly than the disease) is still

far from obvious. The time has thus come for some experimentation, on a small scale to begin with, to explore some possible solutions.

It is in this spirit that we make a modest proposal, which is to amend the standard common-stock contract by introducing a financial reward for long-term investors. While far from perfect, a simple and concrete way of identifying long-term investors is as buy-and-hold investors, people we shall refer to as *loyal investors* following Albert O. Hirschman's classic book on governance, *Exit, Voice and Loyalty* (1970). A basic tenet of classical investment theory is that passive long-term investors should continuously rebalance their portfolios over time in ways designed to maximize their inter-temporal risk-adjusted returns. In contrast, the "value investors" we mentioned earlier tend to be both active and relatively long-term investors who seek out stocks that are undervalued in the short run and hold onto them at least until the market eventually catches on—and often, when trusting in and committed to the managements of their portfolio companies, considerably longer. Such investors are a potential source of value to any company that is suffering from a market misperception of its long-run fundamental value, whether they engage with management or not.

Our proposal, then, is to help companies attract such an investor clientele by offering a *loyalty reward* to buy-and-hold investors. As we explain in detail below, our favored reward is in the form of a loyalty warrant granted to all shareholders, one which vests only after the expiration of a pre-determined loyalty period (say, three years). By offering such loyalty shares (or in short *L-shares*), companies may be able to correct some of the short-term biases they may be exposed to. The use of such shares could not only attract a more long-term investor base and repel day-traders, momentum investors, and other short-term speculators, it could also encourage investors to devote more resources to understanding companies' long-term prospects. Indeed, prospective buy-and-hold investors attracted to the possibility of loyalty rewards will want to estimate the present value of the reward, which would involve an assessment of the firm's likely stock price at the time when the reward vests.

We view this as a simple proposal, limited in scope, that is likely to be suitable for some, if not all, publicly traded companies that are concerned about a potential corporate "underinvestment" problem. It might not deliver much, but it also won't cause much harm. Companies are likely to experiment at first with relatively small loyalty rewards and revise the contract in light of how it performs. They can scale up the rewards or abandon them entirely. While the costs of experimenting with this solution are minimal, the benefits however could be substantial. We now turn to a detailed analysis of how L-shares could be structured, which companies they are likely to be most suitable for, what potential weaknesses underlie the concept and how they might be addressed.

8. Brochet, Loumioti and Serafeim (2012).

L-Shares: How Would They Work?

The loyalty 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 that the right to exercise the warrant is conditional on holding 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 during the loyalty period. In this respect the L-share is similar to an executive stock option, which is also not transferable and vests only after a fixed period of time. Once the warrant is granted, however, it can be traded. In sum, all shareholders would be entitled to the same reward and therefore would be treated equally. Whether a shareholder ultimately receives the L-warrant or not is entirely driven by her behavior. Thus, the loyalty reward as such does not give rise to a dual-class share structure.

The strike price of the warrant may be set in a number of different ways, depending on circumstances. It could, for example, be designed as a simple “at-the-money” call, with the strike price given by (1) the market price of the L-share at the time it is granted; or (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; or (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.

One potential advantage of allowing adjustments in the strike price to reflect changes in stock prices 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, loyal, shareholder base in a bear market, it can achieve this by adjusting the strike price in this way.

But there is also, of course, an argument for making no “look-back” adjustments at all: this warrant structure would ensure that greater market discipline is imposed on management. Poor performance leading to a significant stock price decline would result in out-of-the-money L-warrants and thus would not lock in shareholders. In some cases, companies may even want to offer L-warrants that are initially far out of the money as a way of signaling to its shareholders its ambition (or confidence) that the share price will rise to the point where the L-warrants will be in the money by the end of the loyalty period.

The precise terms a firm sets for its L-shares will generally depend on the intentions the firm wants to convey to the market. This communication or “signaling” role of loyalty rewards may well be the most important aspect for the first companies that decide to establish such rewards. Will the introduction of these rewards be perceived as a brilliant innovation that strengthens the firm’s reputation as a “game-changer,” or will it be seen as a last-ditch attempt to stem the flow of inves-

tors out of a losing business? As with any new share offering, the timing of introduction of loyalty rewards and the market context are likely to be critical for the successful reception of L-shares.

How would L-shares be distributed? For a company that is already publicly traded, the simplest approach would be to announce that all current shareholders will be granted an L-warrant per share. Alternatively, the company could issue L-shares through a rights issue. But L-shares could also be privately placed if management is targeting strategic investors. For a privately held firm contemplating an IPO, the loyalty 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. 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, the L-share could be structured to allow for additional grants of loyalty warrants at the expiration of each loyalty period—a practice adopted by the French multinational *Air Liquide*—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 can also become loyal shareholders over time, so that the fraction of loyal shareholders at any time remains stable. As with executive and employee stock ownership programs, the company could also put in place a share repurchase program to undo the increase in share ownership resulting from the exercise of L-warrants.

Benefits and Uses of L-shares

The structure of the loyalty reward we propose has a number of attractive features. It provides higher rewards in turbulent times to *buy-and-hold* shareholders than a simple loyalty-dividend payment, if only because the value of the L-warrant increases with volatility. At the same time the L-warrant does not hinder exit or undermine liquidity when it is most needed. If the company is mismanaged, its share price will underperform and the L-warrant will be out of the money, so that shareholders will not face any penalty if they sell their shares at that point. We now turn to a more detailed discussion of some of the benefits and uses of loyalty rewards.

Rewarding Costly Long-term Monitoring by a Large Shareholder

Blockholders and activist shareholders provide a “public good” to all shareholders when they monitor management and intervene to correct inefficient managerial policies. These shareholders shoulder most of the costs of these activities, but

Box 2: L-Shares to Reward Monitoring

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 $t = 1$. 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 2 and strike price 1.2) to anyone holding the shares until time $t = 1$ with an ex-ante value* at $t = 0$ of $w = 0.5 * 2/3 * (1.35 - 1.20) = \0.05 . Long-term investors obtain a reward that recoups 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.

**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 Box 4 for a more thorough discussion on pricing.*

spread the benefits to the entire shareholder base. But they are prepared to engage in costly monitoring and interventions only if their own expected rewards exceed the costs. And 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 be able to reap the rewards of their interventions only 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-term) shareholders, who do not require special compensation, and active 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.

Securing a strategic alliance

In practice strategic investments often involve lock-up provi-

sions 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." 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 Buffett made a critical equity investment (which had some characteristics of L-shares) 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. 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 L-share characteristics. While the U.S. treasury's intent was partly to disguise the size of the equity stakes the government was taking in some of the banks, the success of the warrant grants in restoring investor confidence had effects similar to those of an L-share investment.

Box 3: The Michelin Case

By 1991, Michelin's balance sheet had been weakened by an increase of debt since the acquisition of Uniroyal Goodrich in a deal worth \$1.5 billion (among which Michelin assumed \$810 million in debt). Michelin, which had recorded a \$4.8 billion loss in 1990 cut its dividend program but decided to grant L-shares (in the form of a warrant) to compensate loyal shareholders for this loss of income. Specifically, Michelin granted a warrant for every 10 shares held on December 24th 1991. The call-warrant was exercisable at a four-year horizon (December 31st 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. In addition to the free warrant, Michelin proposed a "fidelity bonus" to all the shareholders who held on to their shares for the two year

period between 1991 and 1993 with the same characteristics (parity, maturity, etc.) and with two conditions: the warrant could be exercised only by those shareholders who have held on to their shares for the two years (without any interruption) and who did exercise the classic warrant.

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. 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]."

Michelin Share Price and Warrant Strike



Facilitating a Share Issue

Book-building, underpricing, and flipping are integral parts of the equity offering process. One goal of corporate issuers and underwriters within an IPO is to reduce opportunistic *flipping* of shares in the days immediately following the IPO. L-shares could be an effective way to limit flipping. Buy-and-hold investors may well be more willing to subscribe to L-share issues, thus reducing all these concerns in one stroke.

One interesting precedent for such an offering is the IPO of the former mutual insurance company Standard Life, which offered a loyalty share reward to all its mutual shareholders, provided they retained their shares for the entire first year after the flotation. Any loyal shareholder received at that point one additional share of common stock for every twenty shares acquired during the IPO.

The Effects of Loyalty Share Issues on the Market

We now discuss the likely effects of the introduction of loyalty rewards on the market for the company's stock, focusing on valuation, liquidity, and volatility in particular. This discussion is based both on our own analysis and on feedback we received from other scholars as well as a number of asset managers and corporate issuers.

Transfer of Wealth from Short-term to Long-term Investors

The largest potential downside associated with the introduction of loyalty rewards is a possible transfer of wealth from short-term to long-term shareholders. This effect can be demonstrated using the logic of Modigliani and Miller in which the aggregate equity value of the firm is assumed to be

unaffected by changes in capital structure, including the introduction of L-shares.

To illustrate this transfer using a simple example, let's assume that a company's value per share is \$100, and that it proposes granting loyalty warrants that will have a value of \$2 to all "long-term" shareholders—those who plan to hold them to at least their exercise date—but a value of "0" to the rest. Suppose there are 10 shareholders, so that the total capitalization of the firm before a loyalty reward is introduced is \$1000, and that this total value remains constant after the introduction of the loyalty warrant. In that case, provided all 10 shareholders are buy-and-hold investors, they will all be getting the \$2 reward; and since that reward effectively comes out of their own pockets, their shares continue to be worth \$100 each. Similarly, if all 10 shareholders are short-term investors, none of them gets the \$2 reward, so that again each of them can sell their shares at the price without any loyalty reward of \$100.

But now let's suppose that only one of the 10 shareholders is a buy-and-hold investor, while the remaining 9 are short-term holders. In that case, the loyal shareholder gets the \$2 reward, which is paid out by the firm, and the value of each share drops to \$99.80. In this case, there is a transfer of 20 cents from each of the nine short-term shareholders to the loyal shareholder, who ends up with a total value for her investment of \$101.80.

The size of the transfer and whether it occurs at all in equilibrium depend, of course, on the behavior of shareholders and on each shareholder's ability to accurately predict whether she will be more or less loyal than the average shareholder. If all shareholders can tell for sure whether they are able to hold the share for three years or not, then all that will happen in equilibrium is that the 9 short-term shareholders will sell their shares to 9 other buy-and-hold shareholders for the initial price of \$100—and there is no transfer of wealth. At that price, loyal shareholders are just indifferent between holding the stock or not, and short-term shareholders are better off selling. More generally, the introduction of the loyalty reward is likely to result in a trade between the most loyal shareholders, who are buyers, and the least loyal shareholders, who are sellers, and the equilibrium price will then simply reflect the expected value of the stock to the most loyal shareholders.

Thus a transfer of wealth between short-term and long-term shareholders will occur only if the short-term shareholders overestimate their ability to remain loyal or the long-term shareholders underestimate the probability that they will be able to hold the stock for the entire loyalty period.

But now let's move beyond the M&M proposition and consider the possibility that this re-composition of the share-

holder base towards more long-term shareholders could help bring about higher values, perhaps by giving management more confidence to undertake all positive-NPV projects. To the extent this supposition turns out to be right, the shareholders who are in the best position to appropriate this added value are in fact the *initial* shareholders, who introduce the loyalty reward. And they can expect to benefit regardless of whether they are short-term or long-term oriented. The former benefit by selling their shares at a profit to long-term shareholders, while the latter expect to earn a normal rate of return by holding on to their shares.

Overall, then, the introduction of loyalty rewards ought to induce a shift towards a longer horizon for all shareholders. Buy-and-hold shareholders will focus on the reward they expect to receive at the end of the loyalty period, and short-term investors will ask themselves how much the shares together with the loyalty reward are worth to the long-term shareholders they sell to prior to the inception of the L-shares.

One specific transfer issue of potential concern is the possibility that a controlling (long-term) block-holder could use the introduction of L-shares to acquire shares and expropriate minority shareholders. But if minority shareholders are able to sell their shares to other long-term investors for their fair value, there ought to be no transfer. All the introduction of L-shares would bring about is a uniform long-term shareholder base. However, suppose that, for some reason, there are no other long-term shareholders willing to buy the L-shares. In that case, the introduction of L-shares could indeed result in a positive transfer from minority short-term shareholders to the controlling shareholder. If the controlling investor is not intent on maximizing long-run value, but only in transferring value from minority shareholders, we can envision a scenario in which the controlling investor uses the introduction of L-shares to acquire shares at prices below fair value. In such a situation, the main purpose of loyalty rewards would have been lost sight of.

To limit this possibility of "coercive" transfers, we suggest that in companies where there is a large controlling stake, it may be desirable to require not only majority shareholder approval of L-shares, but approval by a *majority of the minority* shareholders.⁹

Market Liquidity

Another concern about Loyalty-share programs is that the greater incentives to buy and hold during the loyalty period might lead to a substantial reduction in underlying liquidity of the stock. It is probably safe to predict that the introduction of L-shares will have a negative impact on trading at least during the loyalty period. But that is partly the point of

9. Note, however, that under current French and U.S. corporate law a number of rules protect against such a potential misappropriation. Equity issues under French law must be approved by a shareholder vote with a quorum of 25% (on the first meeting) and 20% (on the second meeting), with a 2/3 majority of votes represented at the shareholder meeting voting in favor. Under U.S. corporate law, a sale of new securities generally does

not require a shareholder vote. The board of directors, exercising its business judgment, is entrusted with the authority to issue stock. However, it would be a violation of the board's fiduciary duties to approve an issuance of stock that favors only a certain class of shareholders at the expense of another class of shareholders.

Box 4: Pricing Loyalty-Shares

Even though there is no precedent for the valuation of this instrument, the fair-value based pricing of L shares ought to be straightforward as there exist similar instruments, such as executive stock-options (ESOs) that vest only after a pre-specified period of time and cannot be sold, 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. Like for the valuation of ESOs, the higher the forfeiture rate, the higher the rate of reduction in option value and the rate of reduction must also change depending on vesting period, the longer the vesting period, the more significant impact of forfeitures. Thus, a valuation formula along the following lines may be appropriate:

Fair value L-warrant = Call Option Model * Occurrence Probability

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

Occurrence Probability = Stable Capital/Total Float + Turnover Capital/Total Float * Max [1-(Annual Turnover Rate * Loyalty Period in Years), 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.

Annual turnover rate is the average historic turnover rate.

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.

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, 1996).

L-shares. To the extent that there is too much stock trading anyway, and too much short-term speculation, this cannot be an entirely bad development.

Having said this, there are at least two important countervailing effects that could mitigate this concern about reduced liquidity. First, dynamic hedging of the L-warrants by traders will increase the liquidity of the underlying stock. That is, once the L-warrants vest and are tradable, or in anticipation of the vesting of the warrants, liquidity will be generated by the traders of the warrants, who will seek to hedge their option position by holding an offsetting replicating portfolio (that combines proportions of cash and the underlying stock). Second, although they clearly have value at the time of issue—that is, *ex ante* value—the warrants will turn out to have real

value only if the underlying share price increases. Therefore, the potential reduction in liquidity would occur only in the event of an increase in share price—that is to say, when the reduction in liquidity is not likely to be much of a problem.

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

If secondary-market liquidity is affected by the introduction of L-shares, then volatility is also likely to be affected. Again, the effects of L-shares on volatility are likely to depend on whether the L-shares are in the loyalty period or in the exercise period. During the exercise period, L-shares are expected to reduce volatility, as some long-term shareholders 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 so doing, traders will automatically contribute to a reduction in volatility.

During the loyalty period, however, volatility may well increase slightly as a result of the reduced liquidity. Another reason why volatility may increase is that long-term investors may want to hedge their positions.

Implementing Loyalty-Shares

Any company contemplating a loyalty reward for its shareholders will face a number of institutional implementation challenges, ranging from the accounting and tax treatment of these rewards to finding ways to keep track of its loyal shareholder base. As we discuss below, none of these practical challenges appears to be insurmountable.

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 could argue that grants of L-warrants are similar to a distribution of dividends. As such, loyalty rewards should not affect the income statement. Thus, consistent with both U.S. GAAP and with IFRS, the attribution of an L-share should have no impact on reported earnings per share. Moreover, under both U.S. GAAP and IFRS, L-shares could be booked as equity instruments.¹⁰

Tracking Loyalty. In Europe, the first step is to attribute a new ISIN code to all the initial holders of L-shares (and let’s call it, say, the L-ISIN code). Those shareholders who hold on to their L-shares until the expiration of the loyalty period—and 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 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 the 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.

From a U.S. perspective, the simplest way of tracking holding periods to identify loyal shareholders would be for the company to retain the services of a transfer agent who would act as the issuer’s warrant agent. The retained transfer agent would maintain a register of warrant holders and ensure that no transfers are executed until the end of the holding period,

when the positions would be unblocked. Another approach might be to issue registered warrants where the warrants become exercisable, and the underlying stock becomes transferable, only after a three-year holding period.

Treatment of L-Shares in an M&A Transaction

A company that grants loyalty rewards to its shareholders may be faced with a number of important events during the loyalty period. Among the most important possibilities are bankruptcy and a merger transaction. How should loyalty shares be treated during such events?

Let’s first consider how L-shares ought to be adapted to an acquisition during the loyalty period. In this situation, the exchange of shares is not an individual decision of a shareholder and cannot be attributed to any lack of loyalty towards the company. It therefore makes sense to adjust 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: in that event, long-term shareholders would be able to exercise their L-warrants in advance of the acquisition. Another option is simply to cancel the loyalty reward in such an event. Whatever the intent and design chosen by the firm, the general principle should be that the loyalty reward does not create an artificial barrier to an acquisition. The simplest way of achieving this is just to cancel the reward in the event of an offer during the loyalty period, but there could be other less drastic steps taken, such as the acceleration of the loyalty award to the day of the acquisition offer.

Second, note that if an offer comes after the expiration of the loyalty period, there is no longer any risk of entrenchment, since all shareholders are then on an equal footing with respect to the acquisition. Finally, should the company itself initiate an acquisition involving a share exchange, which would require shareholder approval, then the existence of L-shares should not create any major difficulties since the shareholders of the acquiring firm do not need to trade their shares.

Voting Rights of L-Shareholders. Corporate governance is likely to be enhanced if more say is given to loyal shareholders, who are assumed to 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 reward loyal shareholders with more control rights.¹¹ Although we are not proposing rewards to long-term shareholders in terms of greater voting rights, it is worth noting that even under the

10. L-shares could be booked as IAS32 equity instruments under IFRS because the strike price and the number of underlying shares to be physically delivered are both fixed. According to paragraph 16 of IAS32, the warrant 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. Furthermore, L-shares also

meet the criteria for U.S. GAAP equity instruments: 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).

11. As Dallas (2012) among others has proposed.

Box 5: L-Shares and Other Types of Rewards for Loyalty

There are already existing examples of mechanisms to reward patient investors:

- **Additional dividends:** *L’Oreal* offers a Loyalty bonus to registered shareholders, which grants a 10% incremental dividend to all shareholders who have held registered shares for a continuous period of at least two years, up to a limit of 0.5% of nominal capital per shareholder. The French firm *Electricité de France* and the French bank *Credit Agricole* both agreed to implement similar schemes.

- **Additional shares:** *Air Liquide*, offered both a dividend and a share bonus to all shareholders who kept their shares continuously for at least two years. 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. It is also common to find such offers in privatizations in the UK or France.

- **Additional voting rights:** *Aflac* and *The J.M. Smucker Company* both have shares of the Company’s Common stock entitled to one vote per share until they have been held by the same beneficial owner for a continuous period greater than 48 months, at which time they become entitled to 10 votes per shares.

L-shares obviously belong to the same family of solutions mentioned above but deliver additional outcomes in terms of the four criteria detailed below:

- **Liquidity:** one of the major concerns related to any rewards delivered to a specific class of shareholders is a possible loss of liquidity. L-warrants will generate liquidity related to the hedging activities of traders holding the warrants.

- **Volatility:** L-warrants will lead to a decrease in volatility (through the hedging activities of traders).

- **Alignment with management:** L-Shares can be characterized as stock-options for long-term investors and thus offer an additional alignment of interest with top management who are also recipients of stock-options with long vesting periods.

- **CEO “entrenchment”:** 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

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, when a loyal shareholder base is more valuable to the firm.

	Extra Share	Extra Voting Right	Extra Dividend	L-Warrants
Impact on Liquidity	Decrease (if stock price rises)	Decrease (constant)	Decrease (constant)	Increase ¹
Impact on Volatility	None	None	None	Decrease ²
Impact on Share Borrowing Cost	Increase	Increase	Increase	Increase (if stock price rises)
Better Alignment with Management ³	Limited	None	None	Yes
CEO “Retrenchment”	Light	Possible	Light	No

1. Due to the hedging of traders

2. After the loyalty period

3. Assuming the management is entitled to stock options

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 grant that investor more voting rights. If, on the other hand, long-term investors are expected to remain largely passive, there may not be much of a gain from also giving them more voting rights.

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.

Tax Treatment. There is a special tax event only if the warrant is granted at the end of the loyalty period and then exercised. Otherwise there should be no tax deduction in the event 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, as under French tax law, we would expect the standard capital gain

tax treatment to apply when the L-warrant is sold.

Corporate Law Issues. 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.

Under both French and Dutch law, a company can grant loyalty dividends (*dividende majoré*) or additional voting rights that are subject to a minimum holding period (two-years or longer). The issuance of an L-warrant can be seen as legally equivalent to granting a loyalty dividend, except that it may be subject to shareholder approval. There is not always a specific reference to loyalty rewards in other countries' corporate law, but it seems plausible that the precedents of the U.S., French or Dutch laws will serve as a guide to the legal treatment of loyalty rewards in those countries.

Decoupling and Arbitrage. One question that often arises in discussions of L-shares is whether holders of the shares may be able to undo or "decouple" the right to an L-warrant from the loyalty holding-obligation—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 sell 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 stock 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. In a frictionless financial market, such schemes could undo L-shares. In that case, the worst possible outcome is just the status-quo.

But we do not have frictionless markets. Note first that, under a forward trade in L-shares, the counterparty to the forward trade will probably have to borrow the shares for hedging purposes. This will inevitably add a cost to the transaction, especially if long-term shareholders hoping to obtain a loyalty reward are unable or unwilling to lend their shares. Second, these trades could involve a counterparty risk, which would also discourage such trades. As for setting

up an intermediary fund (to take unique advantage of the L-warrant), it will be a great day for long-term investors and L-shares when such a fund becomes profitable, for it will mean that a substantial fraction of stock markets will be in the form of L-shares. The point simply is that while this is a theoretical possibility, it should not be a concern for the foreseeable future.

Conclusion

Loyalty-shares provide a simple contractual innovation that could help restore the balance between long-term investors and short-term speculators. The main advantage of our proposed approach is that it is up to the companies to decide whether they want to experiment with such loyalty rewards and how they want to tailor the rewards to best fit their individual situation. Precedents have already been provided by the few companies that have toyed with loyalty dividends (see Box 5), and these companies do not appear to have suffered from the introduction of this financial innovation. We would like to draw attention to these experiments and believe that with relatively small modifications loyalty shares could be an answer to the current short-termism of U.S. financial markets.

Our discussions with corporate issuers and asset managers indicate that there is interest in the U.S. and U.K. in the idea of loyalty rewards and L-shares. The corporate issuers we have had discussions with agree that L-shares could help alleviate shareholder pressures for short-term performance, and asset managers with a longer-term orientation would value receiving a reward for their loyalty. But, inevitably, there are also some concerns and reservations. One often voiced concern is that L-shares could be used in some cases to further entrench management. We have argued above that this concern can be addressed by designing the L-share in such a way that it does not deter disciplinary takeovers and the like. Another common concern is that a reward for simply being a buy-and-hold investor does not address the issue of lack of engagement by shareholders. While engaged shareholders are likely to be buy-and-hold investors, at least during their period of engagement, and are thus likely to participate in and benefit from loyalty programs, not all buy-and-hold investors will become engaged or active investors. But if L-shares cannot solve the problem of lack of engagement, they at least help in providing an indirect reward for engagement by rewarding buy-and-hold behavior.

Finally, a major immediate obstacle that corporate issuers have repeatedly brought up is the issue of "signaling." Just as with ordinary share offerings, issuers worry about the potential negative signal the granting of loyalty rewards sends to the market. They ask: won't the market interpret this action negatively? And they suggest that the pioneers in launching loyalty shares will be market leaders who can take advantage of the market's goodwill. It is reassuring that at least the few

examples of companies that have given loyalty rewards to their shareholders (see Box 5) do not appear to have suffered any significant negative responses from the market. While companies undoubtedly need to be wary of negative stock price reactions, the award of loyalty shares can receive a positive response provided that it takes place in favorable market conditions and that the company's intent is clearly communicated to shareholders.

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