



# How to Foster Long-Term Innovation Investment

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The U.S. economy is decades into the shareholder value revolution that has swept equities markets and boardrooms alike. Predicated on the idea that maximizing a firm's share price should be managers' top priority, this movement holds the promise of making corporations more productive and efficient while making investors wealthier. Yet for all its success in driving wealth and making companies more competitive, there remains an important, unresolved tension in this thesis that is usually glossed over: It does not explain how short-term equity market incentives will necessarily deliver optimal long-term decisions.

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## Current market structure incentivizes shorter-term decision-making

Fundamentally, investments differ in their time horizons—how long it takes until they realize a financial return. At the same time, investors have their own time horizons—how long they are willing to hold an investment in order to generate a tangible gain. A firm that bets a dollar today expecting a return of \$10 next year must balance the interests of investors who hold equity in the firm long enough to see the payoff against those of investors who will sell their shares before the payoff shows up in share prices. Economic theory does not serve as much of a guide to managers here. With first quarter earnings now fully reported, the annual investor and media prognostication inevitably follows as they speculate what lies ahead for the remainder of 2015.<sup>1</sup> This practice places a lot of weight on investments that will pay off in the near future; many people believe that as managers work to hit these short-run targets they are making the economy healthier and more productive. Yet it is also possible that unless carefully balanced, this short-term focus is at odds with long-term goals, an idea that has gained traction during the recent years of strong corporate profits without strong gross domestic product, or GDP, growth.<sup>2</sup>

For a while, the economy seemed to be validating the shareholder value proposition as strong economic growth was underscored by an equity market on the rise. As firms changed management compensation throughout the 1990s, stock prices boomed, productivity growth accelerated, and the economy created the broadest-based growth in a generation. However, more recent data suggest that the productivity gains of the late 1990s have not become a new normal. In fact, after these changes in strategic and operational objectives, productivity growth seems to have settled into a pace that is, at best, about the average over the prior 20 years, and possibly significantly worse.<sup>3</sup> By engaging in short-term share price forecasting, the market collectively fixates on immediate growth over the next three quarters rather than growth over the next three years.

Throughout the economy, this behavior could lead to lower growth if patient, longer-term investments—positioned to generate more innovation and GDP growth—are not highlighted as a priority. Managers try to be responsive to both short-term and long-term investors' needs. It is increasingly difficult, however, for companies not to be more short-term focused—even in a well-functioning market—in the face of shareholder demands.<sup>4</sup> To be sure, many companies make long-term investments despite these obstacles. But it is not clear that forcing them to swim upstream against significant economic disincentives produces the best outcome. For more than a decade, growth in corporate profits has not been matched by growth in corporate investment.<sup>5</sup>

Companies know that over time, success depends on the development of their people, processes, and products. Economists have long suggested that a large problem inside firms is a simple principal-agent problem: Investors own a company and benefit when profitability is maximized, but a manager controls the firm day to day and may have different priorities.<sup>6</sup> Companies have sought to align the interests of managers and shareholders by tying decision-making within the firm to share price, as well as other financial and business metrics.

So long as both investors and managers have the same payoff horizon in mind, this arrangement does align incentives, but the assumption that a single time horizon is shared is a strong one. Investors can differ drastically in the payback periods over which investments make sense to them. The vast majority of households invest in firms—typically indirectly through pensions or mutual funds—to finance their retirements. The behavior of these Main Street investors suggests they have a very long-term orientation. Indeed, some of the longest-term, most patient investors are large pension funds, which have a fiduciary duty to maximize the returns of people who need the fund to make payments more than 50 years from now.

Meanwhile, a majority of fund managers are compensated based on their returns over a given year, suggesting a much shorter-term focus.<sup>7</sup> CEOs who are maximizing shareholder value must not only understand the inner workings of the firms they run, but also must somehow balance these time horizons when making decisions about how to pri-

oritize among investments, a detail omitted from simple models of corporate behavior. This problem is trivial if markets perfectly incorporate risk and future returns into share prices, but there is little to suggest that the short-term efficiency of equities markets translates into perfectly rational long-term investing in all cases.

Even on a theoretical level, the overwhelming majority of economic thinking takes time horizons as a given, assuming away the problems of matching up different payback periods. Even then, most economic research has sought to understand the choices that individuals with different time horizons are expected to make in a given context. This is to say, economic theory is better at giving managers the tools to understand how to make patient or impatient investors best off. In the real world, where managers must weigh competing interests, there is little connection between the guidance theory provides on how to maximize share prices and the challenge managers face in weighing the preferences of different groups of shareholders.

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## Policies to support innovation investment in the longer term

From a public policy perspective, it is not clear what the optimal time horizon of a government should be, but it is quite clear that it is considerably longer than that of a short-term investor. A policy agenda that takes steps to incentivize business research and development, rethink patent law, and systematically support investment in employees—and then encourages investors to take advantage of these initiatives by shifting tax policy to reward long-term investment—would make longer-term investments more attractive. At the same time, such a system would delegate the task of picking winners and pricing risk to markets with experience doing just that.

### Encourage research and development

Business funding for research and development, or R&D, which underpins innovation and the translation of discoveries into new products, requires that firms take a longer view. So does investment in projects with high rates of return and long payoff periods. And so do efforts to align the interests of firms and workers to ensure the sustainability of businesses.

Research is an obvious key to long-term productivity—one in which the public and private sectors both play crucial, complementary roles in ensuring that long-term gains are incentivized through smart policy choices. Public support for basic research is the only way to ensure certain kinds of foundational research can happen because there are limits to what markets can incentivize. For example, it is hard to make an investment case for publishing a new discovery about the laws of physics. However, the vast major-

ity of applied research and innovation comes from the private sector, where good public policy means a regulatory system that creates an environment that rewards private R&D when it is oriented toward long-term development and widespread adoption of the best innovative discoveries.

A recent study assessing growth among the 500 largest companies in the world found that investors realize outsized rewards when their companies invest aggressively in R&D and lose value when R&D spending is low. The fastest growing quartile of companies has increased in value by an average of 251 percent since 2012, versus an average of 69 percent for the next quartile. This significant increase in value was supported by substantially higher investment in R&D by companies in the top quartile compared with their peers.<sup>8</sup>

The corporate tax code currently tries to encourage this investment. But the R&D tax credit—which generated \$6 billion in tax expenditures in 2012, according to CBO—is ripe for reform.<sup>9</sup> Currently, the credit subsidizes R&D at older firms at higher rates than at start-ups, and it remains a temporary program, even as its 35th anniversary approaches. It needs to be permanent, simpler, and more available to the newer companies that are likely to need it more. The goal of the program should be to make older, larger firms innovate more and to help new innovators become viable long-term companies.

## Reform patent law

Policymakers should also rethink U.S. patent law. Currently, patent law rewards firms with significant market advantage if they win races in innovation; this is good. However, the rewards can and should be shared: The positive results from invention and innovation must not discourage winners from inventing something new merely to defend a current advantage.

As a concept, patents are hundreds of years old, and there are newer approaches to incentivizing individual discoveries that should play a larger role in the U.S. economy. There is a growing consensus that awarding cash prizes for innovations is a more efficient process of promoting productive innovation.<sup>10</sup> Prizes immediately benefit firms that successfully innovate without creating disincentives for rapid information sharing among innovative companies. Even a less bold approach that uses the tax code to encourage nonexclusive patent licensing could improve collaboration and spur additional innovation.

## Invest in workers

Workers play a critical role in making business successful through their labor, their intimate understanding of how parts of a business work, and their ability to buy the goods and services produced. Recognizing this, companies across the country have been doing much to invest in their people, and they want to do more. Decision-makers should promote policies that encourage further investment in employees. For example, public support for a national system of apprenticeship training would both extend and enhance skills. Tax credits for retraining and retaining current employees would benefit firms and workers as well. By investing in employees, companies can create more fulfilled and productive workforces that are committed to the long-term success of their companies, while providing support to general economic health.

## Improve influence of markets on decision-making

Policymakers can also improve the manner in which equity markets influence the decision-making of executives in publicly traded corporations. The turnover of investment positions has increased in recent years as activist investors and asset managers have focused on short-term performance. The average holding period for a stock on the New York Stock Exchange was nearly three years in the 1980s, but it was only six months in 2010.<sup>11</sup> Given that compensation is increasingly tied to annual equity market performance, the asset managers' focus on short-term performance is in tension with rational long-term investment decisions.

Companies want an appropriate balance of short-term and long-term strategy and shareholder value creation. Investors should encourage management to find and maintain that balance. If investors push management to focus too heavily on short-term benchmarks such as earnings per share, or EPS, then EPS may rise for a time. However, long-term revenue growth, along with investment in products and people, may suffer. Greater investment in employees, through wages that match their productivity gains, can help the company and the economy overall.

## Make the capital gains tax more flexible

Although activist investing has encouraged many companies to become more efficient and competitive with respect to both costs and capital structures, its ubiquity as a force in the market has also pressured companies to capture short-term windfalls. This too often hinders the execution of thoughtful, multiyear strategic plans. It may also be an important factor driving high levels of stock buybacks, which reduce internal funds

for reinvestment in the business. For example, despite the demonstrated benefits of R&D and other capital investment, companies that increase their buyback spending in the presence of an activist do so on a large scale. On average, in the five years following engagement with an activist, companies increased spending on buybacks and dividends to 37 percent of operating cash flow compared with 22 percent the prior year. Meanwhile, their capital investments declined to 29 percent of operating cash flow in the five years following activist activity, compared with 42 percent the year before.<sup>12</sup>

A sliding-scale capital gains tax that determines the rate charged to investors in accordance with the holding period of the security has been considered at least as far back as the 1980s.<sup>13</sup> If properly structured, the tax could provide ample incentive for investors to take a longer-term view of the firms in which they invest and ensure these interests are clear to asset managers. This policy would provide a sustainable balance between rewarding long-term growth initiatives and modestly discouraging trade-offs made for short-term gains.

The existing capital gains tax is nominally targeted at rewarding long-term investment, but it falls short in practice. Hold an investment for 364 days, and it is a short-term gain; hold it for one more day, and it instantly becomes long term and qualifies for favorable tax treatment.<sup>14</sup> There is no theory that suggests investments become magically more prudent on day 365, nor is there any reason to believe that one-year investments have the same effect on long-term growth as 10-year investments. Yet once an investor holds a share past the one-year mark, the tax code provides no incentives to maintain the position any longer. A sliding-scale capital gains tax would involve more time horizons, extend further into the future, and avoid the kinds of kinks in tax schedules that policy wonks hate.

In fact, a more flexible capital gains tax system could be a tool to incentivize more prudent behavior in equities markets over many time periods and provide focal points for investors beyond a year ahead. While more brackets would make taxes more complicated for filers who use slide rules, the added complexity would amount to milliseconds of work for a computer.

It is extremely difficult to outperform markets, even more so in the long run. Consequently, the power of a declining capital gains rate would provide considerable incentives for investors to target gains at longer time horizons. When investors are focused on longer horizons, asset managers have incentives to take a longer view, which filters up to firms. It is not that managers would not be pressured by markets, but they would be pressured by markets to perform over 5 years or 10 years in addition to the goal of delivering strong short-term performance.

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## Conclusion

Short-term results and long-term sustainability need not be mutually exclusive. Pursuing thoughtful, long-term strategy is in the best interest of all. It produces healthier company operations executed by loyal and satisfied employees and delivers real value to shareholders. The current Standard & Poor's 500 price-earnings multiple is more than 26, well above the 10-year average of around 23; few could argue the market is not in elevated territory.<sup>15</sup> In order to sustain and even improve current earnings ratios, policymakers must improve long-term macro growth prospects. Increased reinvestment for the long term would benefit companies, employees, investors, and the economy at large.

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## Endnotes

- 1 For example, see Motley Fool, “6 top stocks to buy in April,” CNN, April 6, 2015, available at <http://money.cnn.com/2015/04/06/investing/stocks-to-buy-april/>; Motley Fool, “6 top stocks to buy in May,” CNN, May 6, 2015, available at <http://money.cnn.com/2015/05/06/investing/stocks-to-buy-may/>.
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- 8 <sup>8</sup> Matthew A. Winkler, “Big Ideas, Big Spending, Big Payoff,” Bloomberg, May 19, 2015, available at <http://www.bloombergview.com/articles/2015-05-19/big-ideas-big-spending-big-payoff>.
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- 10 For example, the Xprize Foundation has awarded prizes to firms that have successfully created technologies to expand commercial space travel and clean up oil spills. The foundation has a number of currently active prize competitions. See Xprize Foundation, “Prizes,” available at <http://www.xprize.org/prizes> (last accessed June 2015).
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