Profiting From Learning:

Do Firms' Investments in Education and Training Pay Off?

EXECUTIVE SUMMARY

Research

White Paper

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Investing in Training Improves Financial Success

Can today's investments in employee training predict a company's future financial performance? A new study from ASTD suggests they can.

The ASTD study provides the first definitive evidence that training investments can yield favorable financial returns for firms and their investors. In addition to providing executives and managers with a powerful new incentive to make training a priority, the findings offer stock analysts and investors a tantalizing promise: having the right information about corporate training expenditures can dramatically improve one's ability to predict a company's stock-market performance.

The Findings: Stock Market Rewards Heavy Training

In 1997, ASTD launched an unprecedented effort to help firms measure and value their investments in education and training. In the process of conducting this work, ASTD has collected a wealth of training-related information from more than 2,500 firms to date—everything from the dollar amounts these firms spend on training and the types of training they provide to the means they use to make training available to their employees.

Recognizing that a significant number of the firms in ASTD's expanding database were publicly traded, ASTD researchers and their partners at Saba Software set out earlier this year to examine the relationship between firms' information about education and training investments and their publicly reported financial performance data. The question at the heart of the researchers' work was whether training investments in one year affected a firm's total shareholder return, or TSR, during the year that followed. (TSR includes both change in stock price and any dividends issued during a given year.)

ASTD's central finding is that data on organizational training investments *do* help to predict a firm's future TSR—and in a big way. Looking at the training investments of 575 U.S.-based, publicly traded firms during 1996, 1997 and 1998, the researchers found that:

- Using a sophisticated statistical model to take into account individual firm characteristics such as industry, company size, prior financial performance and earnings, as well as other financial factors, ASTD found that an increase of $680 in a firm's training expenditures per employee generates, on average, a six percentage point improvement in TSR in the following year, even after controlling for many other important factors.

- When ranked according to how much they spent on training, those firms in the top half of the study group had an average TSR in the following year of 36.9 percent. The TSR for those in the bottom half was only 19.8 percent. By comparison, the S&P 500 had an annual weighted return of 25.5 percent during the same period. Translation: firms in the top half had a TSR that was 86 percent higher than firms in the bottom half, and 45 percent higher than the market average.

How Much Do Firms Invest in Training Today?

Data collected by ASTD indicate that direct costs for training at U.S. firms typically amount to 2 percent of payroll, while indirect and opportunity costs may raise the total to 10 percent or more. Adding to this, the costs of investments in *informal* training are likely to be at least as large as investments made in formal programs.

So the fact is that business managers *do* invest in training. But the ASTD data suggest current levels of investment are less than they would be if firms had more information about the effects of training on their bottom-line performance.

- Knowing how much a firm invests in education and training improved the power ability to predict a firm's future TSR by 50 percent. Without taking training into account, the other factors explained only 12 percent of the variation in TSR. This increased to 18 percent when training and education expenditures were added in.

- ASTD found other correlations when looking at other key measures of financial performance. For example, the firms in the top quarter of the study group, as measured by average per-employee expenditures on training, enjoyed higher profit margins (by 24 percent), higher income per employee (by 218 percent) and higher price-to-book ratios (by 26 percent) on average than firms in the bottom quarter.

How do ASTD researchers explain the positive association between unreported training investment data and a firms' TSR? By suggesting that the level of training a firm provides affects other factors that are valued by the stock market.

The fact that it takes a year after the training investments are made for them to be fully incorporated into a firm's stock price has obvious and important implications for investors, according to ASTD. ***The bottom line****: if investors were able to gain direct knowledge of firms' training expenditures, they could theoretically exploit the one-year lag observed by ASTD and earn above-average returns by assembling a training-heavy stock portfolio.*

The Context: A Dearth of Training-Related Information

Although it is now commonly understood that the acquisition of knowledge is central to the competitive advantage of individuals and organizations in today's economy, the question of how much to invest in workforce education and training has long confounded business executives and managers alike. The problem: firms have never had good information on whether additional training investments will improve their profitability, or whether they will be rewarded by the stock market for making these investments.

In a similar bind have been the investors who might profit from knowing more about firms' training investments and about how bottom-line performance might or might not be affected. Currently, investors have no idea how much training firms do. Why? Because firms are not required to report their training investments to shareholders in the same way they are required to report, say, research and development expenditures. And, even if firms wanted to report these investments, they would need to find a reliable system for measuring such important factors as which employees are receiving training and what types and intensity of training the firm offers.

The unfortunate result is that, despite the growing importance of training in a knowledge-based economy, rational managers respond to the dearth of information by shying away from training, while rational investors respond by ignoring training altogether when picking potential winners in the market.

Looking Ahead: Giving Training Its Due

In underestimating the importance of training, managers and investors are sabotaging their own success, according to the ASTD study. What do they need to set things right? Better training-related information on which to base their investing and managing decisions.

Until now, those seeking more and better information about firms' training investments have encountered two key obstacles. They are:

1. A lack of a standard system for measuring and valuing training investments; and
2. Accepted financial accounting and reporting structures that don't treat training as an investment but as a cost—and a "hidden cost" at that.

Overcoming these obstacles is a considerable challenge, but the discovery by ASTD that training has a very real and demonstrable effect on financial performance should create the necessary pressure for change. If even a few training-heavy businesses (acting in their own self-interest) begin to release relevant training information, investors will be able to act on that information and reward those firms that are doing the most to build their employees' knowledge and skills. Increasing attention to the stock-market effects of the leading firms' training investments, in turn, should prompt other firms to release their own training-related information.

Of course, the usefulness of the data that firms provide will depend on the existence of at least some standard techniques for measuring and valuing training investments. ASTD's freely available system of training metrics (available at www.astd.org) offers proof that a standardized system can be developed—and that firms will use it.

In the long run, however, businesses, investors and government will need to come together to forge a large-scale solution to the problem. Necessary changes would include revising accounting and reporting standards to reflect the new understanding that training is an investment, that training matters in the market, and that everyone would benefit from publicly available, standardized information about training-related investments.

The new ASTD findings highlight the importance of acting now to give training its due. The message is clear: training pays off for businesses and investors alike, and rewards will come to those who pay more attention to the newly proven connection between training and bottom-line performance.

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