Understanding How Skill and Opportunity Drive Outperformance

Investors continually seek investment managers with potential to outperform. However, many managers struggle to explain why they believe their investing philosophies are superior, and many investors are not sure what drives outperformance. Alger's philosophy of investing in Positive Dynamic Change is a unique and powerful combination of two variables that we believe drive excess returns: skill and opportunity.

Casting a Line for Outperformance

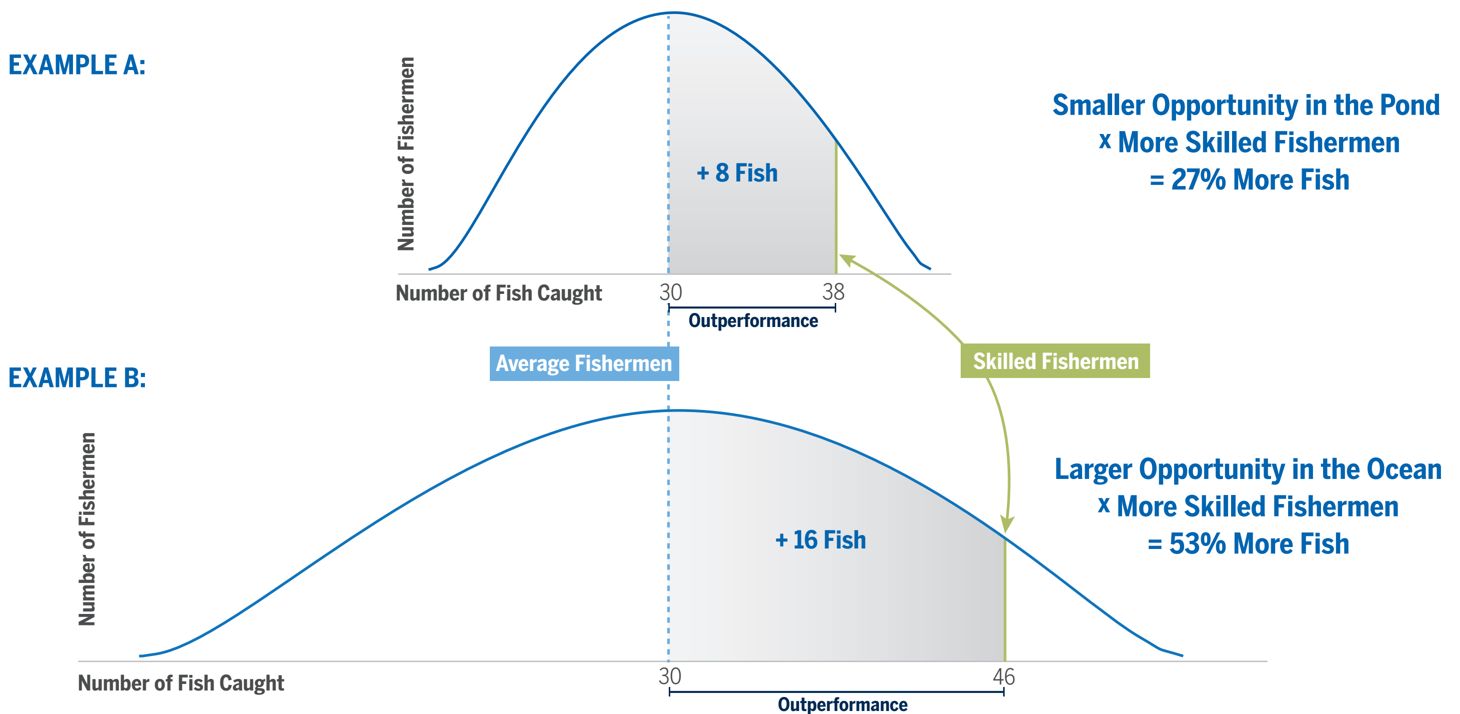
Outperformance can be illustrated by the equation **outperformance = opportunity x skill**.[1] This equation holds true for a variety of endeavors, even fishing. For example, in a competition with 2,000 fishermen, one assumes the more skilled fishermen will catch more fish than the average fisherman. But how many more? The answer depends on "opportunity."

In Example A, assume the competition took place in a pond where the average fisherman catches 30 fish. As expected, the more skilled fishermen performed better than the average fisherman and each catches 38 fish.

In Example B, assume the competition instead took place in the ocean and the average fisherman catches 30 fish. However, each of the more skilled fishermen catches 46 fish.

Ironically, in these examples, the relative outperformance of the skilled fishermen was "equal" (two standard deviations from the average); however, the size of the bodies of water and fishing conditions impacted the variance in the number of fish caught among all of the fishermen. This variance is the "opportunity." The ocean created significantly more opportunity than the pond, which drove larger outperformance—double that from fishing in the pond—despite the fishermen having the same skill level in both scenarios. This example shows that opportunity, combined with skill, plays an important part in determining the degree of potential outperformance.

Figure 1: **More Opportunity with the Same Level of Skill Leads to Greater Outperformance**



SKILL AND OPPORTUNITY IN BASEBALL

The linkage between skill and opportunity can be illustrated by looking at batting statistics. Was Ted Williams' batting average of .406 in 1941 the best hitting achievement in the last 75 years? After all, no one has hit over .400 since! Williams managed to hit an amazing four standard deviations—a statistical feat with a probability of occurring in 1 of 15,787 times—over the league average; however, with better and more pervasive knowledge and training over the years, the dispersion in batting averages has trended down over time (batting average has not). This means that in 2014, the same achievement of hitting four standard deviations over the average would necessitate hitting only about .380—something that has been done several times in the post-War era. The lesson is that the level of outperformance is driven by both skill and opportunity.[2]

Outperformance as a Function of Opportunity and Skill

The first input in the equation, opportunity, is the varying degree of potential outcomes. Opportunity is the dispersion of results or size of the standard deviation. The larger the opportunity, the greater the potential for outperformance or underperformance. In terms of the fishermen, the fishing environment drives the dispersion of the individual catches.

The second input, skill, can be thought of as following a consistent and thorough process, undertaking hard work, engaging in proprietary research, or possessing superior intellect. Skill manifests itself in a competitor's outperformance, measured in standard deviations from the mean. The more skilled fishermen, for example, have the right tools and training that should enable them to outperform the amateur fisherman in any body of water.

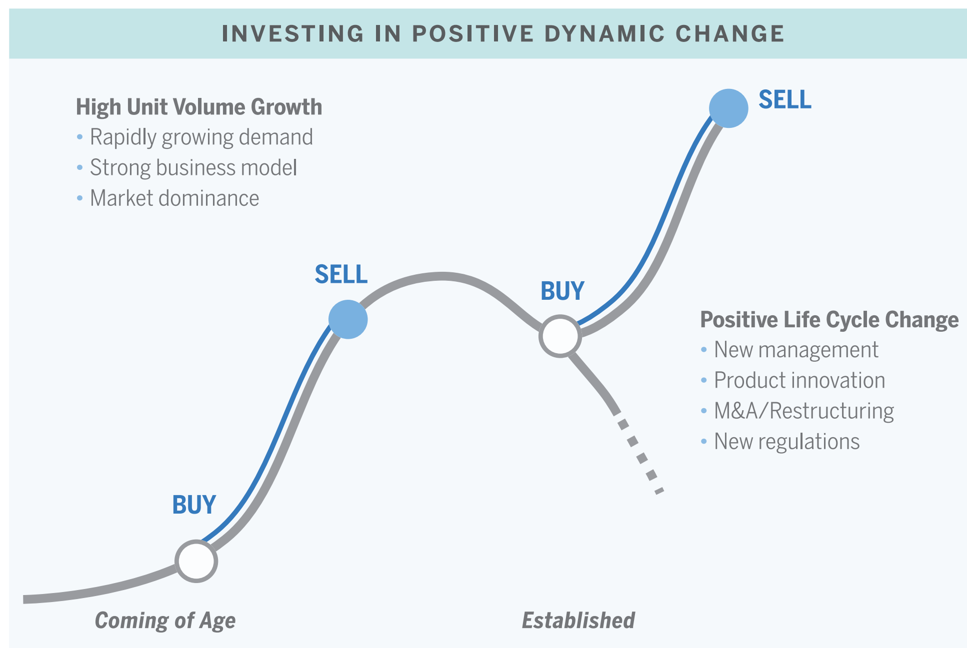
Skill and opportunity are inextricably linked. Skill without opportunity may produce an exceptional result relative to the dataset but a less than impressive absolute result. On the other hand, a lot of opportunity with only modest skill could produce a seemingly large absolute result (positive or negative). Opportunity and skill both contribute to the ability to generate strong returns because manager skill leverages return dispersion. The combination led to a larger catch for the more skilled fishermen in the ocean in the fishing example.

Change Creates Opportunity

Where there is change, we believe, there is more opportunity. As a result, our investable universe comprises companies experiencing change. This is in contrast to many investors that look for investments in stocks with particular fundamental attributes that are perceived to be attractive, such as "value" or "growth." Our philosophy of investing in companies experiencing Positive Dynamic Change drives our analysts to look for two main types of change when analyzing companies:

- **High unit volume growth** companies are those experiencing a growing demand, have a strong business model, or have market dominance.
- **Positive life cycle change** companies are those that will exhibit acceleration in growth, improvement in their cost structure, improved competitive positioning, and the potential for multiple expansion.

Figure 2: **Alger's Investment Philosophy**



We believe these two types of change represent the best opportunities for outperformance because they encompass a wide variety of differing opinions as to the future performance of a company (e.g., earnings potential, cash flow estimates). There is a greater payoff in having a correct yet differentiated view when investor opinions are more diverse. This is analogous to knowing where to fish. Fishing in the ocean versus a pond better leverages the fishermen's skill, so they have the potential for a larger catch versus unskilled fishermen.

Exploring Skill at Alger

Skill, or lack thereof, is essentially magnified by opportunity. As such, skill is crucial when opportunity is large.

At Alger, we believe we are experts in identifying and analyzing change occurring in sectors, industries, and companies. Just as a fisherman builds knowledge and expertise in understanding how to catch fish in local waters, our method of analyzing change is a repeatable, proven process that has been applied to countless situations for more than 50 years.

Our investment team uses a common framework for understanding how businesses and industries evolve and determining who is likely to win and lose. We concentrate on having a deeper understanding of the underlying drivers of change, including technological advances, evolving customer preferences, and new government regulations. Our research process incorporates proprietary fieldwork with industry participants, and we do surveys routinely to gauge customer opinions. Our team forecasts winners and losers by investigating the source of competitive advantage such as intellectual property, brand, platform, and management capability.

Developing a Differentiated View

As our analysts identify companies with the potential for significant change, there are two ways their skills are used to develop a critical, differentiated view. The first is fundamental. This would be a variant opinion of business prospects typically arising from intensive research and fieldwork, such as forecasting higher customer demand for a new product or service.

The second is analytical and is driven by taking a different approach or perspective in analysis relative to other investors. An example would be to understand the drivers of a business better than other investors. This could come from more detailed modeling of the building blocks of demand rather than simply assuming revenue growth rates. For instance, a manufacturer of a critical component for automated driving is likely to have its product included only in certain makes and models. Therefore, it is possible for Alger to more accurately estimate revenue and earnings with a more detailed forecast incorporating that information.

The Bottom Line

We believe that both skill and opportunity drive excess returns for investors. Alger's philosophy of investing in companies experiencing Positive Dynamic Change is a unique and powerful combination of these two inputs. Over the past 50 years, we have honed our skill through our experienced investment team's implementation of our philosophy and process. Our team consists of more than 45 investment professionals who, on average, have more than 14 years of experience. The team intentionally focuses on areas of significant change and, therefore, opportunity. Skill and opportunity combine to create differentiated views and help Alger's investment team to potentially generate strong returns. As such, we believe investing in Positive Dynamic Change is a competitive advantage we offer to our clients.

CHANGE AND OPPORTUNITY

The Food & Staples retailing industry includes companies that embraced intense change and others that have not, which demonstrates how change can lead to opportunity and outperformance.

CVS was a traditional retail pharmacy, but in 2007 it bought pharmaceutical benefit manager (PBM) Caremark. The strategy of combining a retail drugstore with a large scale PBM created an integrated healthcare offering. There was a wide range of views on the potential success of the strategy, with some analysts saying that it would fail. Indeed, some analysts believed the merger was one of the most disappointing deals in mergers and acquisitions history.

The uncertainty of potential outcomes created a large opportunity in the form of a discount in the stock. However, as time went on, the combined businesses began to gain significant market share. The strategy was proven a success—as of the end of 2014, over 80% of analysts rated CVS as a "buy"— and the discount became a premium, driving significant outperformance in the stock as compared to the broader market over the previous four years.

On the other hand, Wal-Mart stayed consistent with its long-held strategy of offering low prices on general retail merchandise. This strategy had driven years of market share gains and made the company into the largest retailer in America. However, Wal-Mart did nothing transformative over the past several years and failed to react significantly to growing competition, such as e-commerce retailers. As a result, its stock price lagged the market over the same time period.

[1] Michael J. Mauboussin and Dan Callahan, "Min(d)ing the Opportunity: Excess Returns Require the Chance to Apply Skill, "Credit Suisse, March 17, 2015.

[2] Stephen Jay Gould, "Triumph and Tragedy in Mudville: A Lifelong Passion for Baseball," W.W. Norton & Company, New York, 2004, pp. 151-171.

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The S&P 500 index is an unmanaged index generally representative of the U.S. stock market without regard to company size. Investors cannot invest directly in any index. Index performance does not reflect deduction for fees, expenses, or taxes.

As of September 30, 2015, equities of the following companies represented the stated percentages of Alger assets under management: CVS Health Corp.,0.67%, Wal-Mart Stores Inc. 0.1%.

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