Where we left off in July last year

In July last year we authored a lengthy note on how retail investors tend to misallocate their capital [*The systemic (mis)allocation of capital, July 2012*]. We use that discussion as a launch-pad to move toward our views on how individual investors can pick stocks successfully and build a strong portfolio for the long haul. A few key takeaways from our July piece which are pertinent to our investment philosophy are recapped here:

- The purpose of investing is to increase one's purchasing power meaningfully over time.
- Risk is not price volatility. Instead, it is the probability of a permanent loss of capital.
- The effort we put into due diligence and research before purchasing a stock is often dwarfed by the time we take for substantially more mundane decisions such as purchasing a household appliance.
- Much to our peril, we view commitments made to liquid, financial assets as largely "reversible" and hence act with a limited degree of diligence when transacting in them.
- Usually, mutual fund managers fail to act meaningfully on their highest convictions. This leads to investments being spread too thinly over too many opportunities rather than being concentrated on a few which have the potential for disproportionate rewards over the long-haul.
- It is impossible to predict prices with any degree of certainty in the short-run. Be sceptical of people who claim to be able to do so.
- Over the long run, the prices of assets will move in tandem with their productivity. Productivity for farms may be measured in terms of tons of output. For companies, productivity is measured in terms of profits.
- Assets like gold offer limited or no productivity, hence it is not possible to have a fundamental view on their viability as merit-worthy investments over the long-run.

Following through from where we left off...

We use this note to share our thoughts on how individual investors, who have the time and inclination to take charge of their equity portfolios, ought to select stocks and start the process of building their portfolios. While the tail bits of our note from July helped frame the important aspects of picking investment-worthy equities for the long-run to some extent, we use this note as a more thorough primer for individual stock selection and portfolio construction. Certain ideas presented in our July note may overlap with material discussed here. Having said that, we include several critical components of stock selection which we did not give due weightage to in our previous note because of the broader focus of that piece.

Our findings may not align with companies we highlight on dmz viewpoints

We also offer some starting points to find compelling investment opportunities. In all fairness, these opportunities may or may not be part of our current core, satellite plus or satellite holdings for a variety of reasons and they may or may not feature on such lists in the future subject to several factors.

Investment philosophies can and do differ widely

Before we launch into our views on stock picking and how investors ought to carry out the process of building a portfolio, we would like to share a word on differing investment philosophies. Please note that our views are shaped by our philosophy of investing capital and that such philosophies vary widely across the investor base. Even investors who classify themselves as "value" investors may fall across a broad spectrum of investment philosophies. Clearly, our views on the kinds of stocks we would consider investment-worthy can and will differ diametrically from the views of other fundamental, value based investors, leave alone short-term traders etc. In short, investing is a social science in which everyone involved agrees to (hopefully, pleasantly) disagree.

Source: Capitaline Plus, DMZ Partners.

What are you looking for?

Before beginning the process of finding merit-worthy companies to fill in your investment basket you need to ask yourself what you are looking for. To know what it is you seek you must have an understanding of what components add up to make the ideal company. This 'ideal' may vary widely based on your investment philosophy. For example, a cigarette-butt style value investor is attracted to companies which are trading far below their intrinsic or liquidation value. Upon realization of that value due to some catalyst, the investor may offload the shares and look to reinvest capital in other such opportunities. Some investors may be adept at understanding regulatory dynamics of a particular industry and may focus on investing in companies which are poised to benefit from them (ie. taking advantage of some form of catalyst they foresee better than others). Others may adopt a thematic approach by picking stocks likely to benefit from specific themes - for example, increased Indian infrastructure spending. Some may follow a macro-based style, where they take up several positions in particular industries based on an understanding of the nuts and bolts of the economy, interest rates, relative valuations of publicly listed companies across sectors and which sectors may outperform others in the medium term.

Mixing philosophies is a blunder

There is an endless spectrum of approaches. One approach may not necessarily be superior to another and the approach one takes is largely a function of skill set, mentality, and understanding of personal emotional biases. These factors affect the ability to take decisions. If as an individual investor, one depends on several sources of advice for picking stocks, one may be blending investment philosophies which do not fit well together. It would be akin to attending a different class in university everyday without consistently sitting in on any one class. You are not going to make any real progress, while building the illusion of being very busy and occupied. It is important to recognize personal strengths and shortcomings to know which investment style and philosophy aligns itself well.

Our investment philosophy is shaped by our lack of capability

Before we define our philosophy in detail, we recognize our weaknesses and how they shape the philosophy we adopt.

Our weaknesses:

- We have no ability to predict prices in the short term and are sceptical of people who claim they do.
- We have no ability to predict macro trends, commodity prices, exchange rates or political trends and are sceptical of people who claim they do.
- We cannot consistently assess whether a company's quarterly or annual earnings will be higher or lower than the market's expectations.
- We have limited understanding of certain sectors of the economy.
- We have substantial gaps in our knowledge.

Areas we possess some capability:

- We believe we are able to recognize some companies that have pricing power and the ability to retain it.
- We believe we can recognize the scalability prospects of certain businesses.
- We believe we can attempt to project the degree of capital intensity and reinvestment requirements of certain businesses.
- We believe we can assess, to some extent, the relative capital allocation capabilities of management teams and promoter groups.
- We believe we can, to a particular extent, recognize the trustworthiness and integrity levels of certain business groups and management teams.
- We recognize the substantial gaps in our knowledge and attempt to steer clear of areas where those competencies may prove to be critical.

Owning good businesses for the long haul

Given our skills (or lack thereof), we prefer to own good businesses for the long haul. In doing so, we expect to earn favourable returns over long periods of time given the scalability prospects, pricing power, low capital intensity, high integrity management teams and lack of complexity of such businesses. Our limited expertise coerces us to narrow in on such a philosophy. Our capability will not be evident in form of activity or churn taking place in our portfolio but through our degree of conviction about the potential of companies we choose to own and hold on to patiently for long periods of time. We attempt to stay disciplined about the price we pay for such businesses upfront. Having said that, we are not active bargain seekers and would rather pay a couple percentage points more for a great business than close to nothing for a mediocre one. Paying a little more for a great business which continues to perform well in the long run will dilute our returns to some extent, but paying close to nothing for a mediocre or poor business may prove to be too expensive a mistake with each passing year.

The declining importance of the 'exit multiple'

Most professional investors tend to fuss over the extent to which they would be willing to pay up for an exceptional company. The thought process is that a great company makes for a great investment up to a particular price. If one pays far above a meaningful price, even the most exceptional company can prove to be, at best, a mediocre investment. However, here is a caveat. If we were to buy a phenomenal consumer business at a 30x multiple to profits (assume Rs. 100 crore of profits and hence Rs 3,000 crore market cap) with a three year horizon and If profits grow 30% per year, at the end of year 3, profits would stand at ~ Rs. 220 crore. Now, say the market sentiment is in the dumps and the stock only trades at a 15x multiple (a 50% multiple contraction!). The market cap at the end of year three would be Rs. 3,300 crore, representing a total gain of 10% over three years or a measly return of 3% compounded annually! However, if our horizon is say ten years, the profits at the end of year 10 would be ~Rs. 1,380 crore. In a dismal overall environment if our multiple once again shrinks to 15x (again a 50% multiple contraction), our market cap would be ~Rs. 20,700 crore at the end of year 10, representing a total gain of ~590% or in other words a healthy return of ~21% compounded annually. This illustrates that although overpaying can cost us dearly if our horizon is relatively short, the "exit" multiple, or the multiple at which we sell our holding matters less and less as the time horizon over which profits can compound increases. Hence, while one must remain cognizant of not overpaying drastically, given our investment philosophy of holding great businesses for the long haul, we can afford to let the effects of compounding offset, to some extent, a valuation compression which may occur because of a relatively dismal market environment in the future.

Exhibit 1: The declining impact of the 'exit multiple'

Year	Profits (Rs. cr)	Multiple (x)	Mcap (Rs. cr)	Aggregate returns%	CAGR returns%	
Y0	100	30	3,000			
Y1	130	30	3,900	30%	30%	
Y2	169	30	5,070	69%	30%	
Y3	220	15	3,296	10%	3%	*Sale scenario 1*
Y4	286	30	8,568	186%	30%	
Y5	371	30	11,139	271%	30%	
Y6	483	30	14,480	383%	30%	
Y7	627	30	18,825	527%	30%	
Y8	816	30	24,472	716%	30%	
Y9	1,060	30	31,813	960%	30%	
Y10	1,379	15	20,679	589%	21%	*Sale scenario 2*

The advantages of our approach

Our approach suits our limited skill set which we have defined for ourselves. Also, it takes away the need to continually find reinvestment opportunities for our capital. For example, as a family investment office, we have owned certain

Source: Capitaline Plus, DMZ Partners.

companies for over a decade. If we had sold those positions within a year or two we would be compelled to find other avenues to park that capital productively. Instead, staying invested in great business franchises has been more rewarding, on average and at the margin, with each passing year. Finally, and perhaps most importantly, this approach allows us to benefit from the incredible power of compounding. The compounding of earnings at a sustainable growth rate over a period of time, which several great business franchises are capable of, leads to exponential results. Stock prices in the long run will converge with the growing earnings power of a company and allow investors with high degrees of conviction and patience to reap rich rewards.

The disadvantages of our approach

One of the key disadvantages of our approach, which we tend to remind ourselves of routinely, is the opportunity cost of a misjudgement. In case of a misjudgement associated with the sustainability of performance of a particular company, the dilution of returns could be high, especially since great franchises with well reputed management teams trade at rich valuations to begin with. These companies can devalue sharply if the market suddenly assesses the sustainability of the story to be weaker than was initially expected. There is always the possibility of companies we own falling into this category. The erosion of fundamental performance of a portfolio company can arise because of a variety of factors.

Holding power

A key feature of our philosophy is time arbitrage, or in plain words, being able to take advantage of the power of compounding over long periods of time and withstand volatility and market noise along the way. To do this, it is of crucial important that one possess holding power, or the ability to hold on to stocks for long periods of time without the need to meaningfully liquidate positions. The source of holding power is based both on financial and emotional stability - either one doesn't suffice. To maintain financial stability, we imply that one ought to only invest surplus, non-core capital in stocks. This ought to be capital that one is not likely to need for a decade. To maintain emotional stability, one must not easily act up on unflattering news about an industry or weak quarterly results of a company one is invested in, and trade irrationally as a consequence.

Guarding against our shortcomings

We take precautions to minimize the probability by tracking fundamental performance and changes to the regulatory environment closely, but that does not eliminate the possibility of such an occurrence. Hence, we certainly believe in not putting all our eggs in one basket - not because we do not have faith in our philosophy of owning wealth creating franchises but because we recognize that our judgement on whether a particular company possesses such traits may prove to be wrong. Hence, we are advocates of owning about ten great businesses in a portfolio. Depending on the number of opportunities one perceives as lucrative at a given point in time, the number of companies in a portfolio could optimally range from somewhere around seven (10-3) to thirteen (10+3).

Justifying our view on quantity of constituents

Retail investors have been over-sold the concept of diversifying their holdings. When most often the end result of their activities is "*di-worse-ifying*". This is further emphasized by most professional fund managers' investing patterns. Most mutual fund managers tend to be "closet indexers". That is, they fail to gather the nerve to act on their strongest convictions, and prefer instead to imitate either their peers or the broader indexes, as their fund performance is judged relative to the performances of other funds as well as the broader markets. As individual investors, we are free from such constraints and hence ought to invest without such considerations bogging us down. While we recognize that there is no magic formula which dictates how many positions we should have, we find ~10 to be a manageable number of companies to monitor.

If we were to own too many companies, we would fail to benefit disproportionately from the upside prospects of any one. Also, we find little meaning in investing in say, your 15th best idea. Instead, the same capital should be channelized toward stocks in which you have substantially more conviction.

Defining how much to allocate to each opportunity

Several considerations would define the weight each stock should be given in a portfolio - the degree of conviction in the investment idea, the nature of business, the number of sectors a business operates in, the industry and the risk appetite of the investor, are a few examples. High conviction ideas with resilient business models and consistent performance should be given precedence.

Allowing for auto-pilot to take control

One must distinguish fundamental performance (how the company performs) from market performance (how the stock price performs). Market performance is a function of how the investing community views the company and its operating environment relative to other available investment opportunities at a given point in time. Businesses may compound capital very differently over time. For example, some investments may appreciate drastically in the first few years and then stagnate for a while. Others may perform relatively sedately for some time and appreciate sharply after a few years. This is a function of several, largely unpredictable factors. The professionals who will attempt to predict and monetize these medium term effects will tend to, on average, lose money, time and sleep in the pursuit. Hence, although the weightage given to each portfolio constituent should be well thought-out initially, it should not be actively tampered with on a regular basis, provided the fundamental performance remains stable. In our view, fine-tuning, or proportioning of constituents routinely, solely for the sake of re-balancing the portfolio to fit certain paradigms would tend to erode performance over time. However, if there have been misjudgements in assessment, changes should be effected immediately.

Defining our ideal company

Given our investing philosophy, we are looking for companies that are easy to understand, have a strong economic moat surrounding their businesses, deliver a high return on capital, have substantial scalability prospects in their operating environments, and operate with the highest levels of compliance and integrity.

I] Companies that are easy for us to understand

It is crucial that we are capable of understanding the businesses, products, services and brands of companies we own. Otherwise we would not be able to ascertain whether their underlying operations are defended by a formidable economic moat. Further, without a solid understanding of the business we would be unable to draft a view on whether the moat is sustainable over the long run. Also, we would tend to lack conviction in the company at exactly those times as when is most necessary. For example, if our company were, much to investors' dismay, make an announcement, "New technology makes our bestselling 4.2TB transformers redundant", we ought to be able to understand the implications and assess the longer-term impact to the fundamentals of the company.

II] Companies that have a strong economic moat

A sustainable economic moat may be in form of a particular brand or technology and allows for pricing power. Pricing power implies the ability to pass on costs to clients. If the companies provide commodity-like products or services they would not have the ability to pass on increased costs to consumers. On the contrary, powerful brands are very capable of passing on costs to consumers and hence protecting profitability margins even when competition intensifies.

III] Companies that deliver a high return on capital

We fundamentally like companies that are capable of delivering high returns on equity and capital employed. Companies that can deliver high and sustainable returns on equity form the foundation of wealth creation engines. Capital intensive businesses which need to reinvest a large amount of capital solely to maintain their sales or profitability seldom have the ability to create wealth over the long run. Companies which either do not need to retain meaningful capital to grow or retain capital but deploy it to deliver impressive returns in form of profitability tend to create substantial shareholder value over time. It is important to recognize though, that the funding mix of a business can play a substantial role in return on equity (ROE) figures. If a business is over-leveraged, returns on equity would look higher than they ought to be. Note that financial companies are an exception as they are in the business of using leverage to enhance returns.

IV] Companies that have substantial scalability prospects

Given the socio-economic and demographic landscape of India, there are several companies which benefit from the sheer untapped potential of the markets they operate in. Across sectors and industries, the per-capita consumption figures for Indian households are a fraction of their western counterparts. This allows us to project the immense opportunities which lie ahead for leading franchises in their respective fields. Given this opportunity, we choose to invest in companies that operate in areas which have substantial scalability prospects going forward. This allows us to have some degree of visibility regarding the scale of top-line and bottom-line growth we can expect over a decade. It gives us the ability to envision the same company, several folds larger in size and scale, as a very viable possibility as opposed to some far-fetched prospect, in the span of a decade.

V] Companies that operate with the highest levels of integrity

We are very selective in owning companies run and managed by individuals of only the highest integrity levels. Looking beyond the financials is very important in any context, but especially so in a country like India where mismanagement can be rampant and take many different forms. As we had highlighted in one of our 'Investment Philosophy' section notes, *What numbers don't say (November 2011)*, "Numbers don't lie, but they don't say everything either". Based on our philosophy, any names marred by scandal or managed by politicians' cronies would be off-limits. In the landscape of a large unorganized sector where cash dealings are commonplace, it is crucial to observe what is unseen. We avoid sectors and companies where we have no ability to do so. We are not hesitant to pay top-dollar for trustworthy franchises, because we operate in an environment where only a select few groups serve as trusted stewards of shareholder value.

Re-phrasing what we're looking for

In our quest for investment-worthy companies, what we are essentially looking for is great capital allocators. This necessitates that the companies and their management teams have both, the capability and the intent to do justice to the capital we entrust them with. In defining our ideal company, trait #I helps us understand and establish what we know and more importantly, what we don't. Traits II - IV express "capability" and trait V expresses "intention".

Different risk-reward profiles for emerging businesses and stalwarts

Broadly speaking, companies we would like to own may fit into two categories in terms of, what we like to call, performance life-cycle. In one scenario, let's call it scenario A, we may choose companies that have consistently displayed all our desired characteristics over time. In scenario B, while the company may not have shown such performance over the past couple years, we may have reason to believe that such performance is likely to materialize and continue sustainably in the future. In our view, to identify the former is far easier than the latter.

Scenario A

The example here, is of a company which has been performing consistently well, with high margins, and steady profitability growth over a decade but trades at rich valuations as a consequence. In scenario A, chances are that the market already has a strong appreciation for the particular company's growth story and hence the company trades at rich valuations. The benefit here is that one is not expecting any sort of turnaround in performance and hence the uncertainty associated with whether that outcome will materialize or not is inexistent. On the flipside, the risk here is that the market has gotten attuned to the consistency of performance of such companies and any blips in performance can create a substantial de-rating of the stock, at least in the medium term. We will discuss later how this can be a unique opportunity for the patient and disciplined investor. Examples of such opportunities would be Nestle India and HDFC Bank.

Scenario B

This is an example of a company which is perhaps missing "one leg" in terms of all the attributes we seek. For example, a company may be run by a very highly regarded management team and have substantial scalability prospects but may be suffering from lower margins because of a sub-optimal product mix. Additionally, we may have a strong view on the company evolving into the 'ideal' within a reasonable timeframe by introducing newer product variants which would enhance pricing power and improve margins. In this scenario, chances are that we may view our new-found company to be a real discovery because it may be trading much cheaper than we would expect it to once the stronger fundamental performance starts to take shape. However, the possibility of being wrong in terms of assessing the prospects for improvement or its timing can lead to erosion of returns over time or indefinite stagnation of capital. If the expected improvement in performance does not materialize or takes far longer to materialize, the time over which certain returns were expected may lengthen indefinitely. In our view, BASF India is a good example of such an opportunity.

Balancing the 'A's' and 'B's'

To generalize, we typically prefer scenario A type opportunities rather than scenario B. However, it is quite possible to have some exposure to scenario B type opportunities as well. Most often exponential results arise from a balance of strong earnings power growth as well as a re-rating of the stock to higher valuation multiples, typical of scenario B type opportunities. However, it is important to note that this benefit can also be gained by investing in scenario A type situations at times when they have been unfairly beaten down because of the market's disappointment with relatively inconsequential details of a quarterly release, or because of an exaggerated market response to relatively weak results, which may prove to be transitory in the long run.

Investors get rewarded for what happens in the future

Whether we choose to invest in opportunities similar to scenario A, B, or a hybrid of the two, an important reminder is that investors get rewarded for how their companies perform after they have made the investment. While all the data, reports and statistics associated with the company will be historical, we have to invest with a view on how things will shape up in the future. While a company may have been a consistent performer over a decade, dynamics may change. It is also important to recognize that causal factors that may have led to that performance. For example, if a textile company does very well over a five year span with very high margins, it may or may not be a sustainable trend. It could very well be that cotton prices were soft over that period and in an environment of rising cotton prices the textile unit may see their margins shrink because of intense competition and an inability to pass on costs to clients. An example of a company with sound historical operating performance which proved unsustainable is Nokia. Hence, it is always important to remember that while performance history throws up a lot of information which one can analyze, it is crucial to strip away the causal factors relevant to the external environment of that period. This will allow us to distinguish sustainable economic moats from transient ones.

Screening historical performance

With that said, we use historical performance as a starting point to narrow down on investment-worthy opportunities. Despite the limitations, historical performance over a longer period of time does give a potential investor insight into the capability and intentions of the company in building shareholder value. Usually characteristics of a business such as pricing power, low capital intensity, high return on equity, and scalability are evident from past performance. Having said that, to recognize whether those traits are sustainable or transient requires substantial further analysis. It is not necessary that only companies that display these characteristics in the past will retain them in the future. There may be emerging businesses that evolve into franchises such as the ones we seek. In screening for opportunities we will only be able to spot companies which have exhibited superior performance over time. We will be missing out on businesses which currently fall short of such lofty standards but might very well evolve to reach such standards over time (type B scenarios, as discussed earlier). Different approaches can be used to attempt to uncover such opportunities as well.

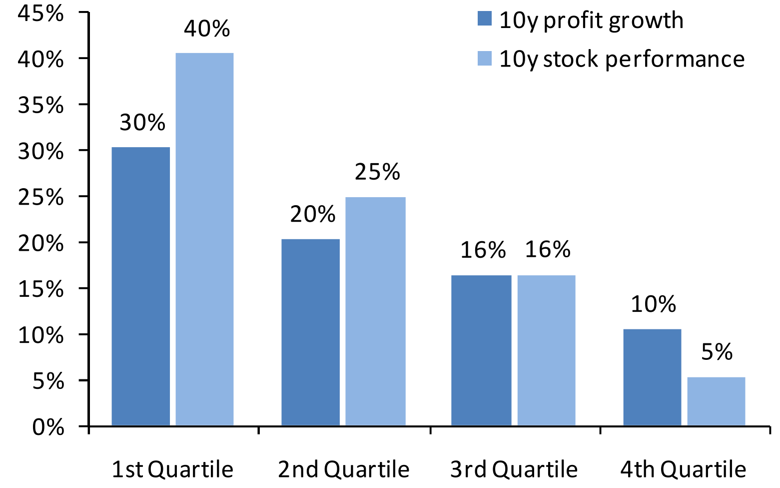
Analyzing past stock price performance and its determinants

Before we launch into screening for companies that will qualify as candidates for further quantitative and qualitative research, we use stock price return data of publicly listed companies to attempt to uncover the key differentiators between high and low performing stocks. We narrow down our analysis to include companies that have at least 10-years of stock price and fundamental data as well as a current market capitalization of at least INR 10 bn (1,000 crores). We recognize the skew created by restricting the market capitalization, however, the broader takeaways from the results remain the same even without the market capitalization floor. This analysis allows us to validate whether the attributes we are about to screen for, are meaningful determinants of stock price performance over long periods of time.

Stock price performance follows bottomline growth...eventually

First, the most basic (and obvious) observation is that company profit growth over 10 years is the strongest determinant of stock price performance over a decade. Top quartile returning companies had median profit growth of ~30% CAGR as compared to bottom quartile returning companies, which compounded profits by only ~10% CAGR. This might not seem like a groundbreaking finding, however, it is a relevant reminder that even though (stock) prices and (a company's) fundamentals may move in different directions in the medium term, one catches up with the other in the long run. Companies which deviate from this trend have clearly experienced some form of valuation de-rating or re-rating either because of market sentiment regarding future expectations or changes in the robustness of the business model or franchise over the past decade.

Exhibit 2: 10 year profit CAGR and stock price CAGR by quartile

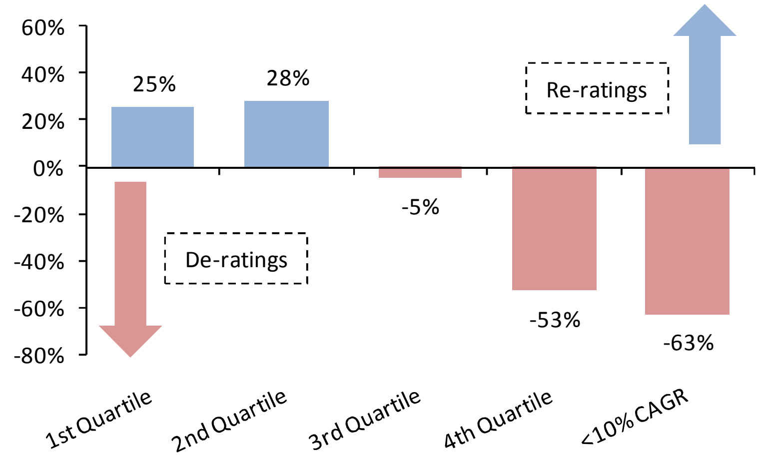


Source: Capitaline Plus, DMZ Partners.

Sustainability of pricing power and high return on equity

In line with our expectations, two other aspects which play a key role in defining how rewarding a company is from the long-term investors' standpoint, are profitability margins, and return on equity. As is evident in exhibit 3, top quartile companies have consistently higher net margins than companies which rewarded shareholders by less than 10% CAGR. Additionally, the margin gap (between top quartile and <10% CAGR performers) widens considerably over time. This lends credence to our focus on formidable economic moats. Top quartile companies are capable of defending and strengthening their moats over time, leading to sustained pricing power. Bottom performers see their pricing power erode over time as competition and rising input costs eat into their profits. As seen in exhibit 4, top quartile performers have higher ROEs which they retain over time whereas bottom performers have mediocre ROEs to begin with which erode over time.

Exhibit 3: Re-ratings and de-ratings by quartile



Re-rating & de-rating among quartiles

Although we have discussed the declining importance of exit multiples over time, we highlight an interesting finding. Top quartile companies experienced re-ratings. That is, stock prices increased more than profits. Profits grew by 30% for 1st quartile companies, whereas stock prices rose by 40%, implying a multiple expansion of ~25%. On the other hand, bottom quartile companies experienced substantial de-ratings. Although profits grew by 10%, stocks appreciated by only 5%, implying a multiple contraction of ~50%. In fact, companies that appreciated less than 10% (compounded annually) over the decade experienced multiple contractions as high as 60%. To put this in context, this is akin to a company trading at a 30x multiple, languishing at a dismal 12x multiple in a decade. Such drastic multiple contraction is difficult to offset with earnings growth, especially if the later have been moderate or weak. Hence although exit multiples play a declining role over time, multiple expansions can be give a nudge to fundamentally strong companies and contractions can significantly erode returns of fundamentally weak businesses.

Source: Capitaline Plus, DMZ Partners.

Exhibit 4: 10 year profit growth (CAGR) and stock price performance (CAGR)

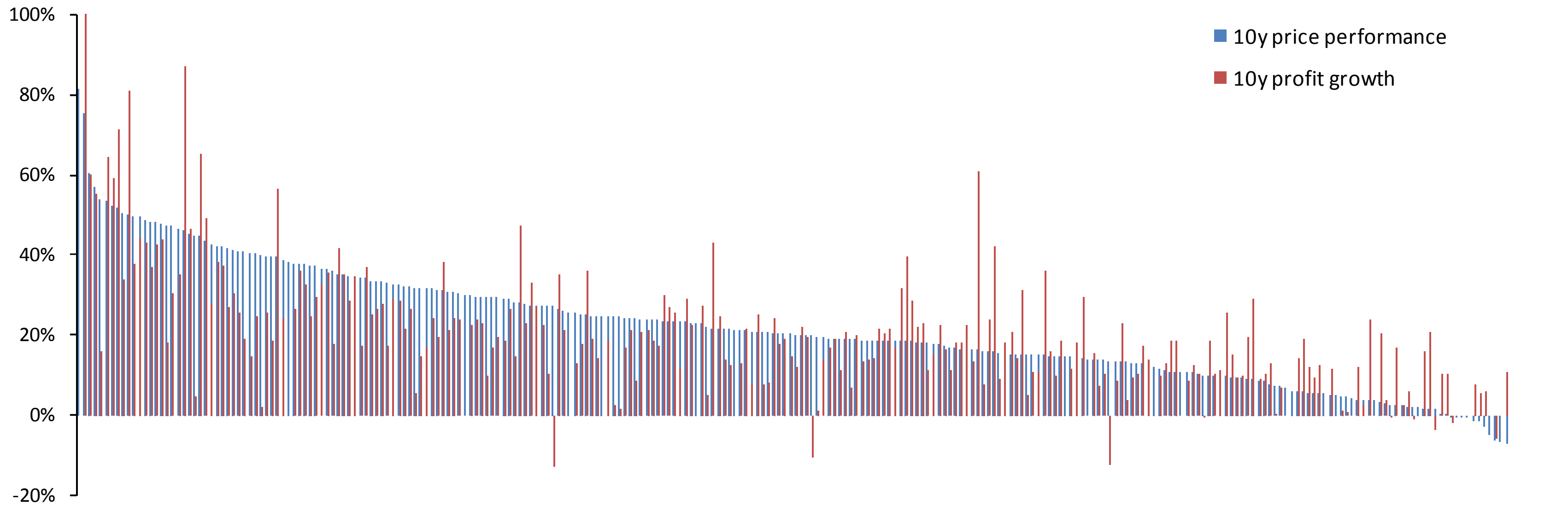


Exhibit 5: Net margins of top quartile versus stocks returning < 10% CAGR

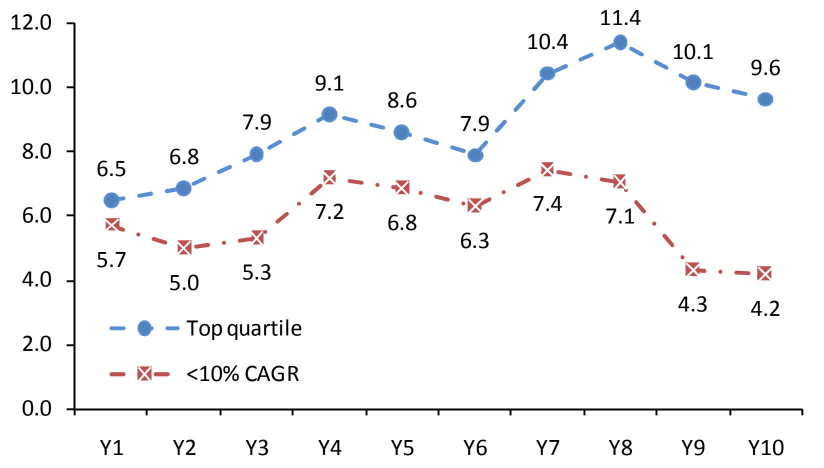
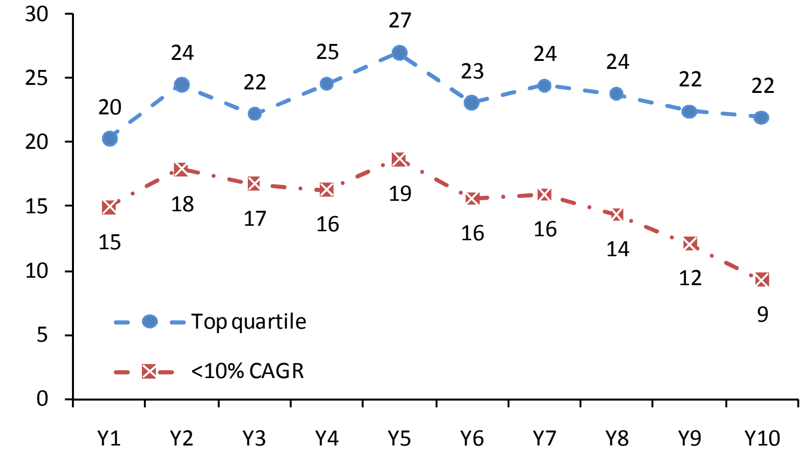


Exhibit 6: ROEs of top quartile versus stocks returning <10% CAGR



Source: Capitaline Plus, DMZ Partners.

Getting to the nuts and bolts

Given our investment philosophy and our analysis of top quartile performing company attributes, we use the power of screeners to narrow down on portfolio candidates. Here is a list of traits we will screen for among the universe of publicly listed Indian equities:

- Current market capitalisation greater than a particular threshold which ensures liquidity to invest meaningful amount of capital.
- Strong revenue and earnings growth over the past decade which illustrates the ability of businesses to scale.
- Consistently high profitability margins which illustrate pricing power and hint at the presence of a strong economic moat.
- Consistently high return on equity which shows low or modest capital intensity and efficient allocation of capital by the management team.
- Prudent use of leverage (on an absolute basis this judgement should differ for banking and financial institutions as the use of leverage is inherent to their business models).
- Modest and consistent dividend payout shows intent of management team to share profits with shareholders. We keep this threshold low, as growing businesses might have superior reinvestment opportunities and long term investors are better off if the business chooses to retain profits rather than pay them out.

What inputs does that translate into for our screener?

While the current market capitalisation is a static measure, we want to 'test' the rest of the characteristics and how they have performed over the long run, so we will use half-a-decade as our time period. If we were to use a shorter time-frame, say three years, we may get interference from external factors, such as particular commodity prices being disproportionately expensive or cheap during that period. By using a five year period, we attempt to balance out such externalities.

At the same time, we do not use a ten-year period as that becomes too stringent and begins to rule out companies which may have evolved into great franchises over a decade but which may not have been necessarily 'compliant' with all our requirements at the outset. Here are the criteria we impose on ~8,600 publicly listed Indian equities. When companies file consolidated returns, we consider these over the standalone entity. This is to take into account companies whose subsidiaries form a substantial portion of their businesses.

Criteria #1. Current market cap greater than INR 10.0 bn (1,000 crores)
Criteria #2. Breaking even or making profits for past 10 years
Criteria #3. Revenue growth of ~20% CAGR over past decade
Criteria #4. Earnings growth of ~20% CAGR over past decade
Criteria #5. Return on equity consistently higher than 15% over five years
Criteria #6. EBITDA margins higher than ~10% over five years
Criteria #7. Net profit margins greater than ~6% over five years
Criteria #8. Dividend payout ratio greater than ~15% over five years

Output = 23 companies

Why aren't we screening for leverage?

One may have noticed the lack of any specific criteria to screen for prudent use of leverage. Surprisingly, this is a tricky quality to screen for and needs to be viewed with a different lens subject to the type of company being assessed. Also, not all debt is created equal, so several qualitative considerations are to be taken. For example, on most screeners available to us, "debt" includes operational liabilities. These may be very high even among exceptional companies and may skew leverage ratios. If we were to attempt to exclude these liabilities, we increase the number of screen inputs and hence increase the potential for error due to data integrity issues. We like to use screens with as few inputs as possible to keep data quality or unavailability issues at a minimum.

Source: Capitaline Plus, DMZ Partners.

The process

Now we go through the process of including banks and financials by running a separate screener specifically for the industry. Further we add back results from "moderations" of our criteria. We call these moderations or relaxations to our criteria, "missing legs" (see exhibit 6). In other words, we would like to include in our purview, companies which may not qualify on only one of the given criteria, however, they may be evolving into exactly the kind of businesses we like over time. This evolution stage could prove to be exceptionally rewarding to shareholders with conviction, holding a differentiated view about these companies prospects. Additionally, these companies may be available at bargains relative to their more lofty peers and could play a meaningful role as part of a well balanced portfolio.

Exhibit 7: Summary of screening process

Step	Description	Output
1	Our original screen	23
2	Running banks screen	
3	Missing legs - market cap	
4	Missing legs - Revenue and earnings growth	
5	Missing legs - ROE	
6	Missing legs - EBITDA and net margins	
7	Missing legs - payout ratio	
8	**Total output**	**62**

The results

In aggregate, 62 companies filtered through our screens (see exhibit 7). Let's call this set our "coverage group". Our coverage group companies warrant close inspection. This would be a fertile ground to find merit-worthy companies.

Exhibit 8: Our "coverage" (sorted in descending order of market capitalization)

Company	Market cap (crores)	Company	Market cap (crores)
TCS	4,15,156	Emami	10,514
ITC	2,50,080	Exide Inds.	9,843
Infosys	2,03,987	UPL	8,221
HDFC Bank	1,59,744	Torrent Pharma.	8,131
Wipro	1,35,338	CRISIL	7,910
H D F C	1,24,756	Sundaram Finance	6,751
Sun Pharma.Inds.	1,19,881	Coromandel Inter	6,521
HCL Technologies	86,399	Shri.City Union.	6,284
Axis Bank	60,215	Page Industries	5,799
NMDC	54,098	Kansai Nerolac	5,730
Nestle India	52,740	AIA Engg.	4,474
Asian Paints	46,943	GRUH Finance	4,362
Power Grid Corpn	45,996	MOIL	3,995
Lupin	41,237	TTK Prestige	3,975
B H E L	40,520	Indraprastha Gas	3,736
Adani Ports	33,825	G M D C	3,571
Dabur India	29,156	SKF India	3,478
Godrej Consumer	28,030	Ajanta Pharma	3,433
Ambuja Cem.	27,780	eClerx Services	3,298
Rural Elec.Corp.	21,112	Jagran Prakashan	2,803
Titan Company	20,304	Dewan Housing	2,386
GlaxoSmith C H L	18,711	Mahindra Holiday	2,229
M & M Financial	17,882	NIIT Tech.	2,102
I D F C	15,898	Zydus Wellness	2,101
Cadila Health.	15,805	Solar Inds.	1,610
Shriram Trans.	14,965	ICRA	1,567
Pidilite Inds.	14,789	Gateway Distr.	1,541
Sun TV Network	14,693	Grindwell Norton	1,434
Marico	14,223	Hawkins Cookers	1,162
Cummins India	13,229	Dhanuka Agritech	867
LIC Housing Fin.	10,532	Swaraj Engines	756

Source: Capitaline Plus, DMZ Partners.

Empirical observations of past returns

We have discussed at length how past fundamental or stock price performance is not reflective of future performance. We have also highlighted why, despite this realization, we depend on screens to shortlist portfolio prospects. Taking into consideration the fundamental performance of the 62 companies from our screens, we now take a look at the stock price performance over a 10 year, 5 year and 3 year period to see if we can deduce any noteworthy takeaways.

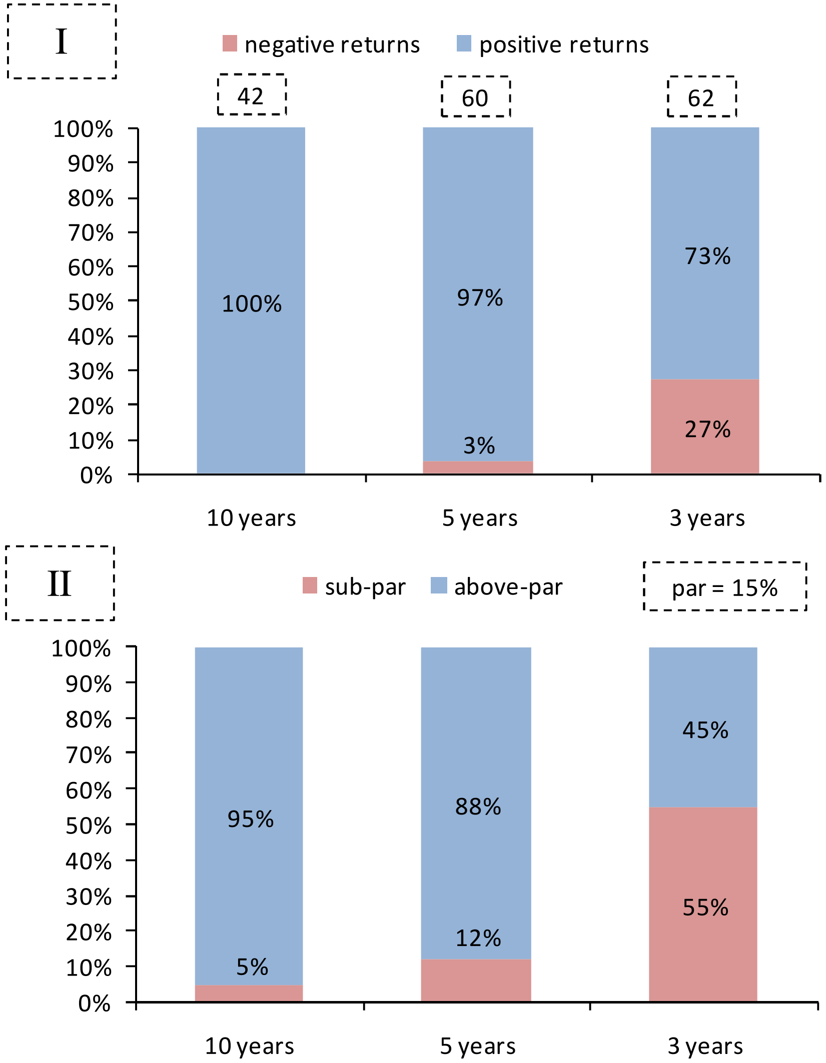
The duration advantage

Among the 62 companies we shortlisted, 42 have 10-year stock price data available. All 42 of these companies posted positive returns over a decade (see chart I, exhibit 9). This is a reaffirmation of our view on the compounding power of earnings over time. Over a five year period, only 2 of the 60 companies (or 3%) which have been listed for this duration, posted negative returns. If we further shorten the investment horizon to three years, 17 of the 62 companies (or 27%) posted negative returns. As the duration shortens, one ought to be increasingly uncertain about the return potential of even relatively resilient businesses. For superior investment performance, screening for good businesses doesn't suffice, patience to hold on for longer time horizons is key.

Raising the bar

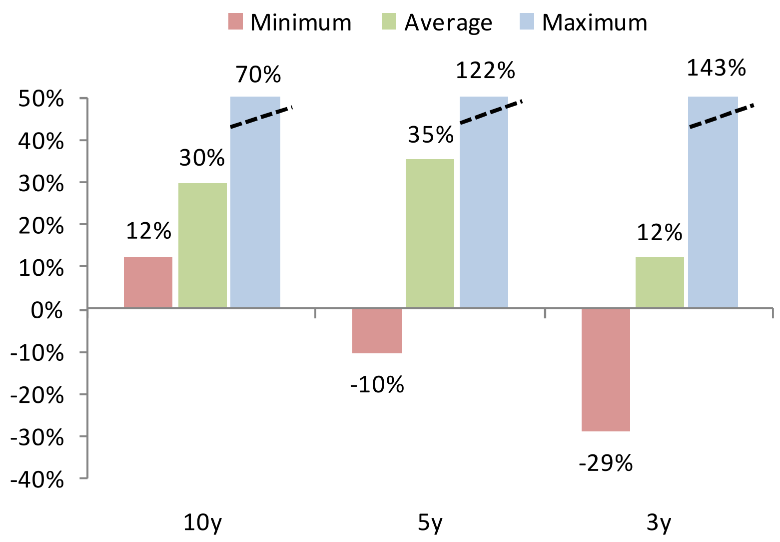
While analyzing absolute returns is interesting, we introduce a 15% threshold (see chart II, exhibit 9) as an arbitrary minimum return requirement for Indian equity investors. Under this criteria, the 'duration advantage' magnifies. A majority of the 62 companies (55%) posted sub-15% returns over a 3 year period. 12% posted sub-15% returns over a 5 year period. Most alarmingly though, 5% of the companies (or 2 out of 42) posted sub-15% returns even over a decade. This is concerning and is also an important reminder of the key disadvantage of our investing approach, which we had elaborated on earlier (*The disadvantages of our approach, page 4*). Let's call this quicksand risk and take a closer look.

Exhibit 9: Returns (compounded annually) profile of our "coverage" companies



Source: Capitaline Plus, DMZ Partners.

Exhibit 10: Over short time horizons returns come with little certainty



Staying above quicksand - a short case study

We will reveal that the one of the two companies that failed to deliver above the threshold over a decade-long horizon is BHEL (Bharat Heavy Electricals), a power plant equipment manufacturer. All share prices we are about to quote have been adjusted for special corporate actions (such as splits and bonuses), if applicable. BHEL was trading at ~Rs. 50 at the end of December, 2003. Today, ten years later, it trades at ~Rs. 170. During the decade, profits at BHEL have risen from ~Rs. 445 crore to ~Rs. 6,700 crore, or 17 times. Despite this, the stock price has risen only 3.4 times (or ~14% CAGR), or only 1/5th as much as profits have risen! To the dismay of the astute investor who might have recognized the potential of this company a decade ago, the stock price performance has not lived up to the fundamental performance. While 14% CAGR returns may not be entirely unsatisfactory to some, this example serves as an important reminder of how strong fundamental performance can be offset in an environment where there is a dramatic compression in valuation multiples. Hence, while the importance of the exit multiple diminishes over time, it never becomes completely irrelevant. If the market adopts a bleak view of a company's future prospects, the extent of multiple contraction can be alarming. In BHEL's case the earnings multiple has contracted from the lofty 33x earnings in 2003 to ~6x earnings now, or a multiple contraction of ~80%!

An important caveat on the 'coverage group'

A very important caveat here is that we are using the 62 companies that we churned out from quantitative screens as a 'proxy'. A qualitatively-blind screen 'tells us' that these companies might have some attributes of relatively resilient businesses. Hence, they may possess certain characteristics we seek in investment-worthy companies. However, as we mentioned, screens are qualitatively-blind. This may have its positives in certain scenarios where personal or emotional biases may interfere with rational decision making. However, given our investment philosophy, prior to investing in a company it is crucial to take into consideration several qualitative factors which a quantitative screen cannot even come close to assessing. To reiterate the obvious, we are clearly not advocates of owning all these businesses. Even at first glance, some of these companies have meaningful corporate governance and promoter integrity issues which would make them completely undesirable to us from an investment standpoint. That notwithstanding, we still view this list as a fertile ground for seeking high quality businesses.

With that said, the screen serves its purpose

As a side note, 8 of the 10 companies we have highlighted in our viewpoints section as either core, satellite plus, or satellite holdings, happen to qualify on our list of 62 coverage companies. Based on the methodology we have used above, the non-qualifying companies (2 out of 10) may be considered, figuratively speaking, to have more than one 'missing leg'. The implications of our

Source: Capitaline Plus, DMZ Partners.

disclaimer on page 1 notwithstanding, it would not be unrealistic to expect some of the additions to our core, satellite plus, or satellite holdings for our viewpoints section, to be sourced from this coverage group in the future.

The groundwork begins now

While we have discovered a fertile ground where companies with most of the traits we are looking for may be found. We need to further filter this group to find truly meritorious companies which qualify on the basis of not just their quantitative strengths but also on their qualitative traits. We need to figure out what the stories behind these companies are. How is the corporate governance? How minority shareholder-friendly is the promoter? Why do we believe strong performance is likely to sustain for several years? What is the enduring source of competitive advantage? How will senior management allocate shareholders' capital? To what factors does the company owe its strong past performance? How is the corporate culture? These factors play a crucial role in helping us shape our views. We highlight the relevance of some of these considerations below.

Assessing integrity

While we have already expressed the importance of high integrity management teams and promoter groups, we elaborate on some of the 'red flags' that make us cautious. We avoid companies in which several members of the family promoter group have a say in decision making and hold large equity stakes in the company. We also avoid companies in which promoter group family members are hired in various senior capacities of the firm. With that said, there are several companies in which promoters have transitioned away from day-to-day operational control and have become trustees of family wealth. Hence, we do not entirely write-off strong business franchises which might be majority promoter-owned, before gaining a clear picture of the level of promoter group involvement. We avoid companies where there have been large related-party transactions among promoters or entities controlled by them. We also like to take a look at compensation trends - often we find family promoter driven organizations compensate themselves disproportionately higher salaries, bonuses and stock relative to their more professionally managed peers. We are uncomfortable in situations where rewards of the people running the show are not well aligned with the interests of the shareholders (the real owners) of the company. We also avoid companies on whose board's we sense a deficiency of independence. We typically would not invest in a company if family members or close associates form a majority of the board of directors. We also avoid companies whose fortunes appear to be steered by one individual despite the availability of strong managerial talent. We prefer decentralized organizations where delegation and responsibility is more meritocratic. To keep our stance especially defensive, we even avoid investing in companies from industries which are traditionally subject to a high volume of cash-based transactions. For example, Indian real estate or jewellery companies. Over time, promoters have become increasingly sophisticated in building an illusion of professionalism and integrity around their operations. Hence immense due diligence and grass-root level research is required on our part in this sphere.

Assessing capital allocation

We would like to be shareholders of companies with management teams that have the capability to be phenomenal allocators of shareholder capital. As a first step, we appreciate being owners of high-quality businesses which churn out healthy profits. However, as a second step, we find it crucial for the management teams to display competency in either ploughing back those profits for lucrative purposes and increasing shareholder value or finding the most efficient way to return excess capital to shareholders. We avoid management teams or promoter groups that are determined on "empire-building". For example, if a mid-size confectionary company based in Kochi were to spend an exorbitant amount of cash (earned over several years) to purchase an ultra-luxury hotel in London's upmarket Mayfair district, we would view that as an alarmingly poor use of shareholder capital. In essence, we are looking for management teams that will do justice to the capital we entrust them with, by deploying it in areas where both, their core competencies and lucrative shareholder returns lie.

The source of past performance and the sustainability of future performance
Our screens are an expression of historical data. The performance of companies that have qualified on the basis of our screens could have been superior due to a number of external factors. For example, an excessively lax regulatory environment for gold finance companies might have lead to a sustained period of fundamental and market outperformance. However, such performance may prove unsustainable in the future subject to a change in regulations. It is crucial for us to be able to strip away any such external causal factors to be able to assess the factors that were inherent to the company itself. This allows us to assess the durability of fundamental performance in the future. Given that political, economic, social, technological, regulatory and ecological environments (among several others) will continue to change drastically over time, we are looking for businesses whose performance will remain relatively resilient through high turbulence and rapid change in their operating environments.

Assessing existence and durability of competitive advantage
In line with our views on past performance and future durability, we need to have a very clear understanding on the source of competitive advantage for a prospective portfolio company. If we cannot assess the competitive advantage, we would be unable to recognize the source of pricing power. That is, if we cannot recognize why the products or services a particular company offers are superior to those offered by their competitors, we cannot appreciate the ability of a company to raise prices in response to rising input costs. If this is the case, one should steer clear of owning shares of that particular business. In any given industry, profits tend to aggregate among players that offer substantial value-add. The rest of the participants in that given industry tend to be low-margin commodity product businesses whose prospects rise and fall with the supply-demand dynamics of that particular commodity. It is crucial to own the former rather than the later. The former have very clear and evident competitive advantages and value propositions, the later do not. For example steel prices respond to supply-demand dynamics of steel production capacity. It is close to impossible for a company to have a substantial and enduring competitive advantage, which can be insulated from intensifying competitive pressures, in such an industry.

Stick to what you understand
One must restrict oneself to areas where the ability to recognize these competitive advantages exist. For example, a trained chemical engineer may be able to recognize high-margin specialty chemicals from low margin commodity chemicals. While one can continually work toward expanding one's circle of competence, it is crucial not to extend oneself outside that circle without a clear understanding of whether the underlying economics of the business under study are superior or not.

Seeking value among relatively weak medium term price performers
After rigorously analyzing the qualitative considerations, some of which we have highlighted here, and narrowing down the list to companies in which we have high conviction, an interesting place to find value bargains would be among the relatively weaker 3-year stock price performers. As investors with an eye on the long-haul there may be especially interesting bargains available among companies in which we have high conviction but which might have had transient performance lapses recently. This may happen due to, for example, a tepid market response to expansion in a new geography. External operating factors tend to average out in the long-run, especially in growth environments. When the going gets tough and bottomline growth may be difficult to achieve, premium business franchises tend to make progress in several intangible ways.

Source: Capitaline Plus, DMZ Partners.

Such intangible progress may become evident as soon as the environment begins to turn. As long as the fundamental business model is not impaired and the external operating environment has not turned completely hostile (for example, due to change in important regulations governing an industry), one can expect to find rewarding bargains which may deliver handsome returns over the long haul.

Seeking value among weak medium term performers - a short case study

In our view, IDFC, the infrastructure finance company, is a prime example of such an opportunity. The stock has returned ~8% CAGR over a 5-year period and (negative) -16% CAGR over a 3-year period. In other words, the stock is down 40% cumulatively since the beginning of 2011 with substantial volatility in the interim. In case of a revival in the investment cycle, which in our view will happen eventually, though we have no ability to predict precisely when, IDFC will be a key beneficiary. For financials, assessing the credit, cost and distribution is key. We believe two of these to be intact and expect the third to be falling in place soon. The senior management team has a reputation for conservative credit practices and prudence. Regulatory requirements prevent IDFC from raising low-cost deposits and also mandate higher capital adequacy levels (15% vs. 9% for banks). We view this as an unsustainable (from a regulatory point of view) and a transient situation. Several catalysts could lead to a change in sentiment as well as an improvement in fundamental performance over time. These include the issuance of a banking license or a clear move to diversify the asset base. While the occurrence of the former is a possibility, that of the later is a certainty. Either factor (or both) will lead to an increase in return on equity over time as well as an improvement in the fundamental outlook and market sentiment. We view the current market opportunity as a substantial dislocation between the prospects of the company (in lieu of upcoming catalysts) and the share price, which hovers around ~Rs 105, ~1.1x book value, or ~11x forward earnings. We expect to compound capital at ~20% CAGR by investing in IDFC over relatively long periods of time. With that said, we reserve the right to be wrong.

Staying undeterred by irrationality

One of the most challenging aspects of investing is being able to resist irrationality when it is the flavour of the season. To recognize irrationality as it is rather than justifying its existence with meaningless caveats such as "this time it's different" is a daunting task. Stock prices of companies we like or even markets more broadly can become incredibly irrational. This may be an opportunity to take advantage by purchasing companies one has conviction in at compelling prices. Further, in case one is already fully invested at such a time, it is crucial to not lose conviction and jump the ship! We elaborate on this point with the use of an example. In late August 2013, IDFC was available at ~Rs. 80. The stock was trading at ~0.85x book value, implying that the market was of the belief that the total shareholders' equity of the company would likely contract by 15% because of loan losses despite the heavy provisions the company had already taken to prepare for them! Longer term level headed investors of the company might have been perplexed at this irrationality. However, the fact that the company had to reduce its foreign shareholding limits to be in accordance with banking license requirements was pushing down the share price. It would be a real pity if investors holding conviction in the prospects of the company over the long haul, would lose that much needed conviction when confronted with the declining share price. In conclusion, after the research and due diligence process but before we begin to purchase any particular stock, we prepare ourselves with the mentality that the stock will likely drop substantially after we have finished buying our last lot. This helps us mentally minimize the significance of unpredictable share price movements over short-medium time horizons. The one caveat that we are reminded of due to a framed quote that sits in our office is that this is possible only in the absence of leverage. It reads, "Markets can remain irrational longer than you can remain solvent" - John Maynard Keynes.

Source: Capitaline Plus, DMZ Partners.

Thoughts on non-qualifiers: Too many missing legs

Companies that fail to make it into our coverage - by failing to qualify on our screen and on the basis of moderations of any one criteria, may also hold immense opportunity. In fact, the return potential for select "non-qualifiers" may be substantially higher. Markets may have largely recognized the merits of historically strong performers and their shares may be available only at rich valuations. However, a non-qualifier may be available at a bargain given that a view on strong prospects may not be a widely-held idea. When there is a wide dislocation between one's view and the market's view on the prospects of a company, immense opportunity is born. With that said, the risk of being wrong increases in such situations (in terms of potential capital erosion or stagnation).

A stray thought - the power of "no" and "I don't know"

Over the years, one has typically associated progress in the world of business with phrases in the affirmative, "yes". When an important customer comes up with an unconventional request, management graduates are trained to say, "yes!". In fact, for a salesperson to say "I don't know" can be potentially career-threatening. Quite to the contrary however, in the world of investing, "no" and "I don't know" are incredibly powerful tools and the individuals who are not embarrassed to deploy them have reaped disproportionately rich rewards for themselves or their shareholders. For management to have the conviction to say "no" to seemingly glorious actions that could earn them a "special cover feature" on Forbes or Fortune, because they fundamentally view the corporate action in question to be depreciative toward shareholder-value, is a rare and incredible strength. One should seek out companies with management teams that have the self-assurance to remain indifferent to the external validation associated with often value destructing actions (such as large acquisitions, or business expansion into newer business verticals or unknown foreign markets). The managers that remain steadfast in their focus on enhancing shareholder value through most often, more mundane methods make for substantially better capital allocators.

The power of saying "I don't know" is equally important from the perspective of the investor. As an investor, it is more important to recognize the gaps in our knowledge and steer clear of areas where those competencies may be of crucial importance. Professional investors may feel embarrassed in recognizing the gaps in their knowledge when confronted by peers and would prefer to share their uneducated guesses rather than confess their shortcomings. While doing so may make sense from a career point of view, it can prove disastrous in the process of capital allocation. It is better to know a lot about very few things than know a little about practically everything. A little knowledge about anything can prove to be capital-destructive. To guard ourselves against this phenomenon, we avoid investing in areas where we have no knowledge, but remain even more vigilant, in not investing in areas where we have little knowledge.

Identifying great corporate cultures (and avoiding mediocre ones)

All individuals of the economy respond to incentives. The way in which we are incentivized defines how we will behave and perform, whether at work or in society at large. Similarly, identifying companies where the incentives are well aligned with the interests of shareholders can be especially rewarding. Also, recognizing companies where this is not so can be even more rewarding, as it may be a red flag which prevents one from allocating substantial capital to a company where the incentives are misaligned. For example, if a large business house, at their annual business heads town-hall meeting makes the following declaration, "75% of our revenues in 2020 will originate from acquisitions we make". The incentive structure of the managers changes dramatically. To gain recognition managers will now be focussed on looking for interesting acquisition targets in their particular businesses rather than focussing on ways to increase value internally. Acquisitions may or may not be accretive to shareholder value, however, smart and timely calibrations to the existing businesses certainly can. Identifying cultures which reward employees on the basis of meaningless goals (from a shareholder-value perspective) can prove vital to know what not to own.

Source: Capitaline Plus, DMZ Partners.

Lifelong learners - sharpening the tools of our trade

At dmz partners, we view ourselves as lifelong learners. We attempt to sharpen our tools of the trade by reading, seeing and listening. We attempt to read 'broadly and deeply', so to speak. We like to read about a broad range of topics and deeply about topics in which we might possess some competency. We learn by seeing, because we like to travel across the country to better assess ground realities and to calibrate what we read while sitting on our desk with what we see at the grass-root level. We like to keep our ears to the ground, literally. We also use travel as an opportunity to meet with relatively unknown (as of now) management teams and promoters. There are several business franchises doing exceptionally well outside the purview of analysts and investors domiciled in Mumbai, Singapore or New York. We attempt to listen to these undiscovered management teams closely and benefit from their vision. We also attempt to become increasingly better listeners by listening to what people who have been in this trade (investing and investment research) for substantially more time than ourselves, from different parts of the world, have to say about the benefits and travails of different value-investing approaches and how they can be adopted successfully in different environments. Reading, seeing and listening helps us continually evolve and fine-tune our skills, and ways of thinking over time. We have been disproportionate beneficiaries of the brilliance of others who have been generous, often unknowingly, in sharing their insights with us.

The investing process at dmz partners

At dmz partners, we work hard to define our coverage group. Just like we narrowed down on ~60 companies through our screening process above. Through our proprietary investing approach we shortlist ~50-odd companies to monitor closely. However, we do not restrict ourselves to just screens. In fact, we use a number of methods to triangulate on our coverage group of companies. We routinely add or remove companies from the list subject to changes in fundamental performance of the companies or the external environment. We keep researching and learning until two factors collide. One, we should have gained substantial conviction in the investment idea and, two, the company's valuation should be lucrative. If either factor is not in order, we wait and continue to research. We are not necessarily adamant in our views on whether meeting with company management teams adds value or creates biases. We recognize the pros and cons. In the process, we try to insulate ourselves from the associated biases while attempting to gain meaningful insights about the business model or the sources of competitive advantage. Sometimes we might be ready with our conviction but the valuation may be too demanding. We wait for valuation to turn favourable, either due to an enhancement in earnings power or an erosion of share price. Waiting is a big part of what we do. We are evolving to be patient without fidgeting. As we have learnt over time, in investing, inaction can be substantially more rewarding than action.

Closing remarks

I hope I have effectively conveyed some of our views on picking winning stocks and building a resilient portfolio which is poised for the long haul. We hope to elaborate on associated thoughts and ideas in shorter follow-on notes in the investment philosophy section of the viewpoints portal. To continue the tradition of ending our more verbose pieces with a quote from my father, I offer the following - "What is the purpose of conviction if you fail to gather the courage to act on it?" I hope some of the ideas discussed here will be useful in managing your growing corpus of investible assets. Although I have amalgamated the ideas mentioned here, I have certainly not originated all of them. I have been heavily influenced by my father's views on investing (and life) as well as several books, periodicals, shareholder letters and individuals I have been fortunate to have come across. As a reminder, dmz partners is a proprietary investment firm which does not market or sell investment-related products or services of any sort.

I invite your comments (soumil@dmzpartners.in)

Source: Capitaline Plus, DMZ Partners.

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Source: Capitaline Plus, DMZ Partners.