Risk-reward arbitrage of investing in quality

The holy grail of investing in stock markets is to buy companies which can sustain a healthy ROCE with growing capital employed, thereby delivering consistent earnings growth over long time periods. In this newsletter, we divide the Nifty50's constituents into three buckets – A (no moats), B (shallow moats), and C (deep moats) based on their historical ROCE and revenue growth. Unlike the standard definition of risk-reward framework (i.e. increasing returns come with rising risk), the Indian stock market offers an arbitrage. Bucket C companies not only delivered healthier returns vs the broader market, the risk involved was also much lower, similar to that of a Government bond!

"And the things best to know are first principles and causes. For through them and from them all other things may be known but not they through the things covered by them… But these things, the most universal, are perhaps the most difficult things for men to grasp, for they are farthest removed from the senses." – **Aristotle** (384-322 B.C.E.), Metaphysics

First principles thinking in stock market investing would suggest the following:

- All investors (not speculators) in the stock market intend to make a healthy return on their investment over long periods of time
- The simplest way to understand what drives share price performance of a company is the following mathematical equation: *Price = (Price / Earnings) x Earnings*
- Out of the two components of share price movement defined in the equation above, over the long term, while the earnings of a stock can compound, the P/E multiple does NOT compound. For instance, you can find companies whose earnings grew from 10 units to 100, and then to 1000 and 10,000 over a long time period. However, there are no stocks which saw their P/E multiple growing from 10x to 100x, and then to 1000x and 10,000x.

A combination of the three bullets highlighted above would suggest that long term share price performance of any stock is determined by its ability to compound earnings over the long term.

That brings us to the next question – how can one measure the ability of a company to compound its earnings over the long term? Using first principles, the most common way for a firm to compound its earnings over the long term is to first deliver healthy earnings on its capital employed (i.e. a healthy ROCE) and then redeploy part of these earnings back onto the balance sheet and hence grow the capital employed. Ongoing sustenance of a healthy ROCE on a growing base of capital employed then delivers sustainable growth in earnings over time.

Searching for evidence of such an engine of consistent earnings growth in the long-term historical financials of a firm, would therefore mean, looking at a combination of consistent and healthy revenue growth and ROCE of a firm.

In the Indian context, where the country's nominal GDP growth (real GDP growth + inflation) has been higher than 10% consistently, and where cost of capital in the country has been around 15% consistently, the bare minimum that an investor would want from the management of his investee company is to beat these two benchmarks as the firm's revenue growth and ROCE respectively. Sounds easy, but let's see how many firms manage to deliver this.

Analysing the constituents of Nifty50, as they existed in 2008

Sensex and Nifty50 are the most commonly used benchmarks in Indian stock market. So, let's divide the Nifty50 constituents of a decade ago - 2008 - into three buckets based on their revenue growth and ROCE delivered over FY08-18:

Bucket-A (A for Airlines): Companies who have delivered >10% revenue growth and >15% ROCE in less than or equal to 3 financial years over FY08-18. These are companies which do not possess any moats, and hence are not able to sustain healthy ROCEs.

Bucket-B (B for Buffett): Companies who have delivered >10% revenue growth and >15% ROCE in more than 3 financial years, but less than or equal to 7 financial years over FY08-18. These are companies with shallow moats that get challenged every now and then by aggressive competition.

Bucket-C (C for Compounders): Companies who have delivered >10% revenue growth and >15% ROCE in more than 7 financial years over FY08-18. These are companies which perhaps possess deep moats that are difficult to break into.

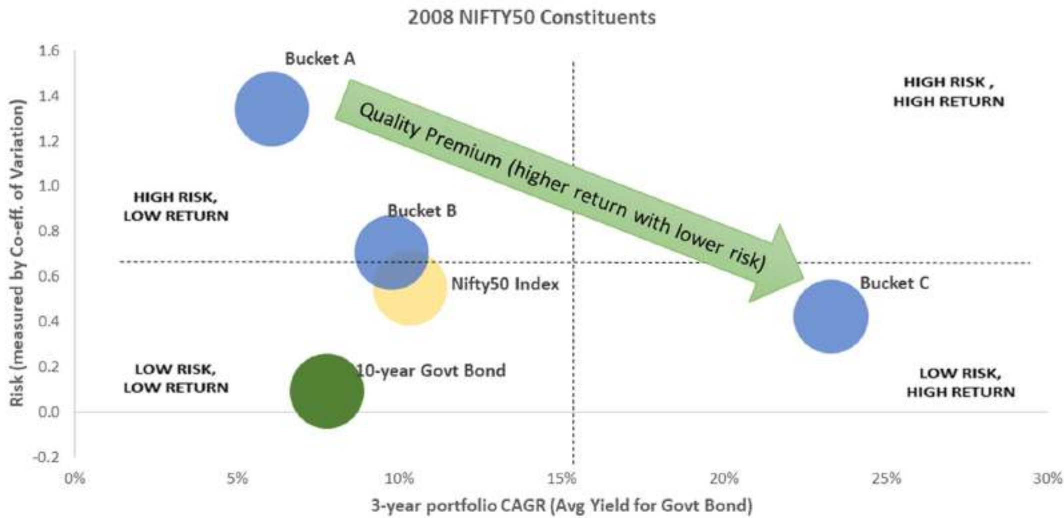
Exhibit 1: Dividing Nifty50 of 2008 into three buckets based on number of years with >10% revenue growth and >15% return on capital employed over FY08-18

Bucket A	# of years	Bucket B	# of years	Bucket C	# of years
Grasim Industries	3	Cipla	7	HDFC Bank	11
Larsen & Toubro	3	GAIL	7	HDFC Ltd	10
Ambuja Cements	3	ITC	7	HCL Technologies	9
Bharti Airtel	3	Infosys	7	Maruti Suzuki	9
ICICI Bank	3	Mahindra & Mahindra	6	Sun Pharma	8
Tata Steel	3	Tata Motors	6	Zee Entertainment	8
National Aluminium Co.	2	ACC	5	TCS	8
Reliance Industries	2	Hero MotoCorp	5		
ABB India	2	ONGC	5		
Siemens	2	Wipro	5		
Bharat Petroleum Corp	1	Punjab National Bank	5		
DLF	1	State Bank Of India	5		
Steel Authority Of India	1	Bharat Heavy Electricals Ltd.	4		
Suzlon Energy	1	Hindustan Unilever	4		
Tata Power	1	Cairn India	Assumed in Bucket B		
Unitech	1	Ranbaxy Laboratories			
Vodafone Idea	1	Reliance Petroleum Ltd			
NTPC	1	Sterlite Industries (India)			
Reliance Capital	1				
Reliance Comm	1				
PGCIL	0				
Reliance Infrastructure	0				
Hindalco Industries	0				
Reliance Power	0				
Tata Communications	0				

Source: Ace Equity, Marcellus Investment Managers

Next, let's create equal weighted portfolios of stocks in each of the three buckets in 2008 and analyse the risk-reward of a three-year holding period return of these portfolios. We use monthly rolling 3 year return data points i.e. (1st Apr 2008 to 31st Mar 2011), (1st May 2008 to 30th Apr 2011), (1st June 2008 to 31st May 2011) and so on. The exhibit below shows the outcome of this exercise. Alongside the three buckets, the exhibit below also includes data points for Nifty50 (i.e. the index as it has evolved over the past decade).

Exhibit 2: Risk-reward arbitrage offered by Bucket C: >20% CAGR with risk similar to that of a Government Bond



Source: Ace Equity, Marcellus Investment Managers; 3-yr holding period returns are computed on a monthly rolling basis from 1st April 2008 to 31st March 2019, as explained in the text above exhibit 2; After Cairn, Ranbaxy, Reliance Petro and Sterlite got de-listed, we have assumed their allocations to compound at risk free rate of 8.2%

Analysing the constituents of Nifty50, as they exist in 2019

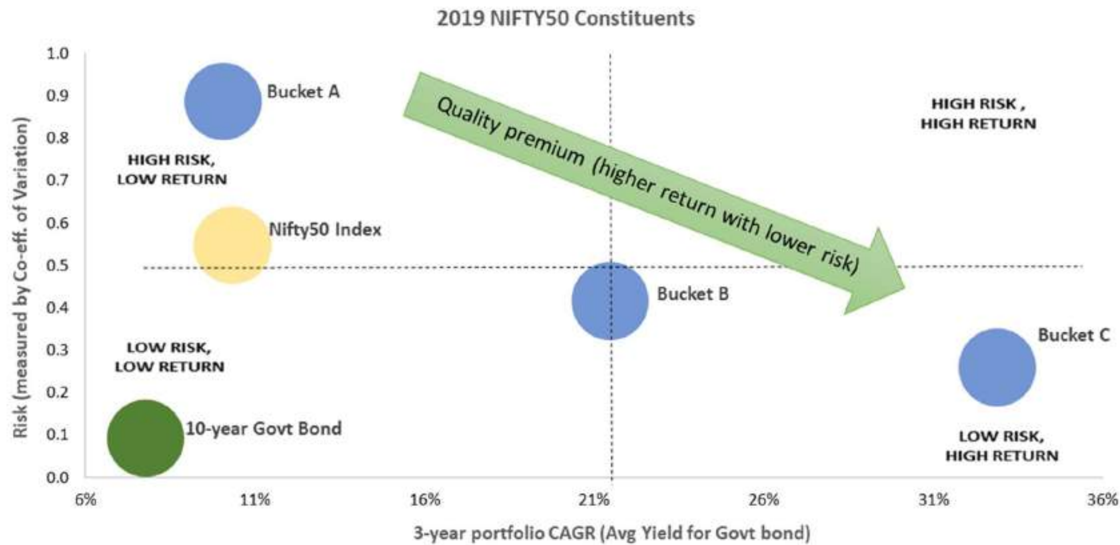
Even if one were to repeat the exercise highlighted above for today's Nifty50 constituents, using their revenue growth and ROCE reported over FY08-18, and then look at the performance of today's Nifty50 constituents over the past decade, the outcome is very similar to what we saw with 2008 Nifty50 constituents.

Exhibit 3: Dividing Nifty50 of 2019 into three buckets based on number of years with >10% revenue growth and >15% return on capital employed over FY08-18

Bucket A	# of years	Bucket B	# of years	Bucket C	# of years
Bharti Airtel	3	Britannia Industries	7	HDFC Bank	11
Grasim Industries	3	Cipla	7	Yes Bank	11
ICICI Bank	3	Eicher Motors	7	HDFC Ltd	10
Larsen & Toubro	3	GAIL (India)	7	Axis Bank	9
Tata Steel	3	Infosys	7	Bajaj Finserv	9
Indian Oil Corporation	2	ITC	7	HCL Technologies	9
JSW Steel	2	Tech Mahindra	7	Maruti Suzuki India	9
Reliance Industries	2	Vedanta	7	Asian Paints	8
Adani Ports	1	Coal India	6	Bajaj Finance	8
BPCL	1	Mahindra & Mahindra	6	IndusInd Bank	8
NTPC	1	Tata Motors	6	Sun Pharma	8
Bharti Infratel	0	Hero MotoCorp	5	TCS	8
Hindalco Industries	0	Indiabulls Housing Finance	5	Titan Company	8
PGCIL	0	Kotak Mahindra Bank	5	UPL	8
		ONGC	5	Zee Entertainment	8
		State Bank Of India	5		
		Ultratech Cement Ltd.	5		
		Wipro	5		
		Bajaj Auto	4		
		Dr. Reddys Laboratories	4		
		Hindustan Unilever	4		

Source: Ace Equity, Marcellus Investment Managers

Exhibit 4: Risk-reward arbitrage offered by Bucket C: >25% CAGR with risk similar to that of a Government Bond



Source: Ace Equity, Marcellus Investment Managers; Three year holding period returns are computed on a monthly rolling basis from 1st April 2008 to 31st March 2019, as explained in the text above exhibit 2

Investment implications

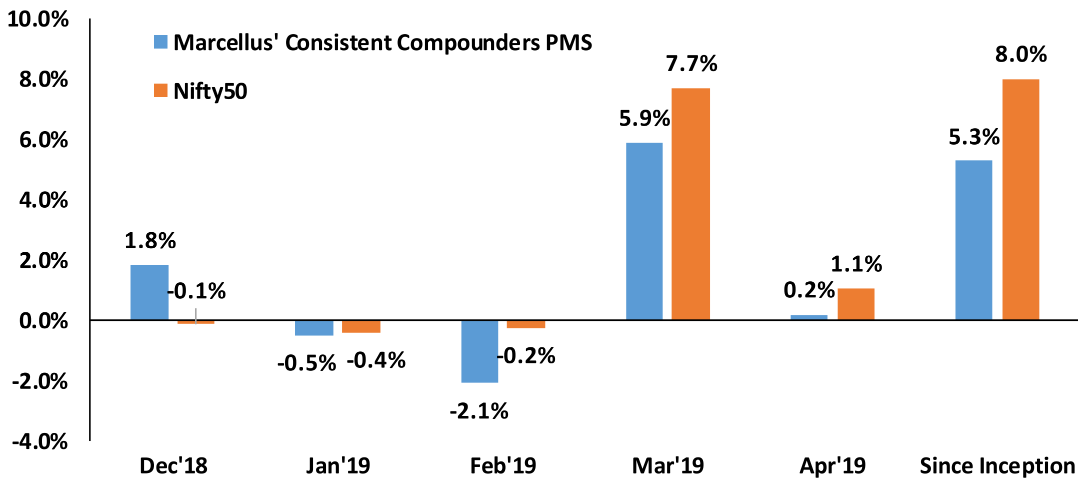
Following are the key conclusions emerging from the analysis above:

- Unlike the standard definition of risk-reward framework (i.e. increasing returns come with rising risk), Indian stock market offers an arbitrage. Over the past decade, if you chose companies which delivered >10% revenue growth and >15% ROCE in a reasonably consistent manner, not only did you get a much healthier return vs the broader market, this return came with a much lower risk as well – similar to that of a Government Bond!
- Over the past decade, a portfolio of companies from Bucket C made redundant, the top-right quadrant of Exhibit 2 and Exhibit 4. In other words, there would have been several investment philosophies over the past decade which aimed at delivering >20% CAGR over a 3-year investment horizon by taking a high risk in the form of spotting a 'unicorn' / multi-bagger amongst small caps, or by timing events (general elections, macro-economic parameter), timing cycles, valuations etc. Any such investment philosophy which involved higher risk in exchange for and 20-25% CAGR in returns, was worse off, compared to companies in Bucket C which delivered lower risk for the similar or higher returns.
- Regardless of when you did this exercise over the past 25 years, the Indian stock market has always offered this arbitrage of generating low-risk and high-returns.

Marcellus' Consistent Compounders PMS – Performance update

Marcellus' Consistent Compounders PMS has a coverage universe of just over a couple of dozen stocks, which have historically delivered a high degree of consistency in ROCE and revenue growth rates. Our research process then involves, understanding the reasons why companies in our coverage universe delivered a great historical track record. Based on this understanding, we construct a portfolio of 10-15 companies with an intended average holding period of stocks of 8-10 years or longer. The latest performance of our PMS is shown in the chart below.

Exhibit 5: Marcellus' CCP PMS performance as on 30th April 2019



Source: Marcellus Investment Managers; All returns are absolute returns net of fees and expenses; Methodology used to compute returns is TWRR / XIRR for the entire AUM; Inception date: 1st December 2018

Regards

Team Marcellus

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