INVESTMENT MANAGEMENT

Morgan Stanley

2015

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Connecting the Dots

March 2016

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We titled one of our 2015 essays 'Why we write'. This wasn't a philosophical take on an existential question but just a reminder to ourselves of the merits of writing things down. We used a Chinese proverb in that issue that we thought put it quite well - "The faintest ink beats the strongest memory"- and that's really been the raison d'être for the *Connecting the Dots* series.

CTD, as we now call it, has just finished its fourth year and what started as a replacement for a cookie-cutter investment newsletter has now morphed into a much more serious effort. We felt that even though there are plenty of market and stock commentaries in the public domain, there are very little, at least in India, written by people who actually ply the investing trade as full-time professionals. So our essays are more from the practitioners' view-points rather than sector or market recommendations. With your encouragement and immensely helpful feedback, we have tackled ever more ambitious topics with each passing year and, hopefully, we are improving as writers. Sometimes we cringe at a few of the cumbersomely worded pieces we wrote early on, the same way one would cringe while looking at an old photograph from college. But that's what makes 'growing up' fun!

In 2015, we wrote about this great game called investing including its all-important behavioral facets, about India's macro-economic landscape and once in a while gave the spreadsheets a break by writing about survival tips in an age of information overload or how to guard against the reverberations in an echo chamber. We present all our pieces in this compendium and hope you find them engaging.

Sincerely,

Amay Hattangadi
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Connecting the Dots

Simhavalokana 2015*

In his book, *Black Box Thinking*,[1] author Matthew Syed highlights the divergent approach to failure in the two most safety-critical industries in the world, namely aviation and healthcare. In the airline industry, the process of evaluating failure is institutionalized. Every aircraft is equipped with two, almost-indestructible, black boxes; one records instructions sent to the onboard electronic system, and the other records the conversations and sounds in the cockpit. By systematically learning from failures and working to make improvements, the aviation industry has attained an impressive safety record. In 2013, the accident rate in the aviation industry was one per 2.4 million flights. In contrast, Lucian Leape a Harvard University professor, estimated that a million patients are injured by errors in hospital treatment and that 120,000, die each year in the USA alone.[2] It is believed that preventable medical error in hospitals is the third biggest killer in the USA, behind only heart disease and cancer.

While having such institutionalized processes is a big advantage, the gains need not be restricted to just failure mitigation. Having a log of what goes on in the cockpit also enables operational improvements and better productivity, all leading to superior outcomes. How we wish, as institutional investors, we had a black box that recorded our thoughts and actions while running our portfolios, but short of that, we have to make do with a periodic, reflective look back at the time that went by.

In the spirit of spotting mistakes, improving processes, and hoping to become better portfolio helmsmen, we conduct our annual exercise of looking back at what Mr. Market dealt us in the year gone by and as always, stay away from the tribe of crystal ball gazers attempting to make predictions for 2016.

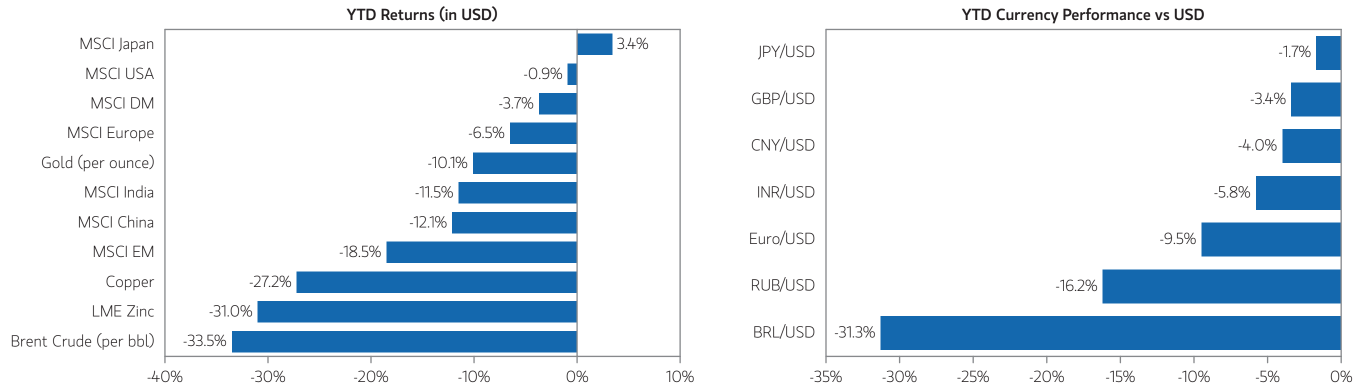
* Simhavalokana is a Sanskrit term to denote the retrospective gaze of a lion. It is said that as the lion traverses some distance in the jungle, he looks back to examine the path he chose and how he covered that distance.

[1,2] Matthew Syed (2015). *Black Box Thinking: The Surprising Truth about Success*. UK: John Murray (Publishers)

1. A bad year for investing

The year 2015 was unequivocally a bad year for almost all asset classes. To borrow a phrase from Bill Gross,[3] investors have been crying in their beers in 2015. Barring a long U.S. dollar trade in the currency markets, most other assets from oil, gold and commodities to bonds and equities performed poorly, even more so when measured in U.S. dollars. That the best performing large equity market for the year was Japan, with a paltry dollar return of 3.4 percent tells the story *(Display 1)*. Once in a while, Mr. Market will hand a D grade to every pupil in the class.

Display 1: **Long USD worked in 2015**



Source: Bloomberg, RIMES, MSCI, Morgan Stanley Research. Data as of December 15, 2015

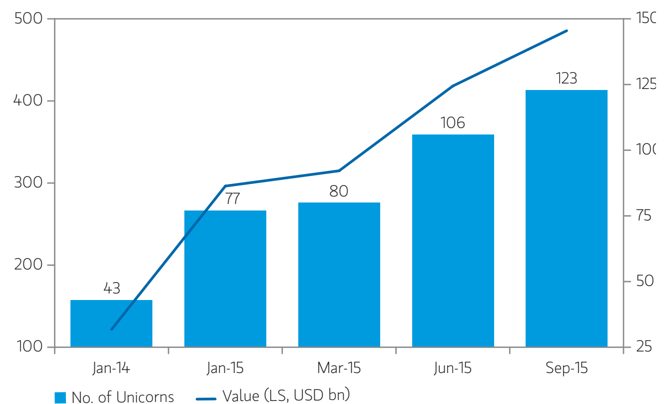
LME Zinc – LME Zinc Cash ($), LME Copper – LME Copper Cash ($), Brent Crude – BFO Crude Oil Spot px Index, Gold – GOLD spot US Dollars Per troy Ounce

Past performance is no guarantee of future results.

2. The party was behind closed doors

Though there was no Samba on the streets for the public market investor, behind the closed doors of the private equity club, the party was roaring. As per a Goldman Sachs report, in the USA as at September 2015, more than 120 companies were valued at more than a billion dollars in the private market (popularly called "unicorns"), up from just 43 at the beginning of 2014 *(Display 2)*. These trends were mimicked in India as well. The best performing company in 2015 in India might well have been an e-commerce company[4] with its valuation going up in every successive round of funding, from USD 1.6 billion in early 2014 to currently about USD 15 billion. Liquidity can find its way into unexpected places.

Display 2: **The rise of Unicorns**



Source: Goldman Sachs Research, Dow Jones VentureSource and The Wall Street Journal. Data as of September 2015.

[3] Pimco's Gross Rues U.S. Debt "Mistake" (Aug. 2011). Retrieved December 22, 2015 from Financial Times.

[4] Source: Goldman Sachs Research, Dow Jones VentureSource and The Wall Street Journal. Data as of September 2015.

3. Fixed deposit is also an asset class

For only the third time in the last fifteen years, bank fixed deposits were the best performing asset in India, out-performing equities, gold and property *(Display 3)*. After returning 32 percent in 2014, equities (BSE 100) were down 6.4 percent in 2015. At this time last year, expectations were running high for a strong performance for equities in 2015, based on hopes of a reform oriented government and a V-shaped cyclical recovery in the economy. At the beginning of the year, very few would have given fixed deposits even an outside chance of being the best performing asset for the year. The importance of disciplined asset allocation for retail investors, maintaining a balance between equities and fixed return instruments, was reinforced.

Display 3: **Performance of asset classes**

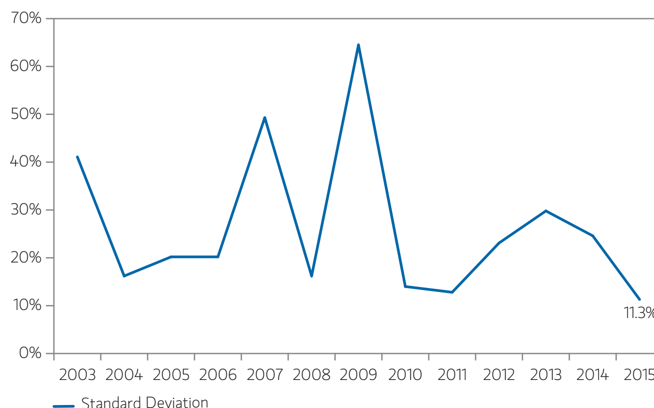
	Annual Returns (in INR)[5]			
	Gold	**Property**	**Equities**	**Fixed Deposit**
CY 2001	5.3%	2.8%	-22.3%	8.5%
CY 2002	23.1%	5.7%	8.7%	7.8%
CY 2003	12.8%	9.2%	87.4%	6.0%
CY 2004	0.7%	15.8%	19.2%	5.0%
CY 2005	8.5%	28.8%	40.6%	5.5%
CY 2006	20.8%	30.9%	42.8%	5.5%
CY 2007	16.4%	49.3%	61.2%	7.5%
CY 2008	26.1%	15.8%	-54.2%	8.3%
CY 2009	24.2%	-10.5%	86.2%	9.5%
CY 2010	23.2%	15.3%	17.0%	6.0%
CY 2011	31.7%	7.3%	-24.8%	8.5%
CY 2012	12.3%	9.7%	31.2%	9.3%
CY 2013	-4.5%	7.1%	7.4%	8.5%
CY 2014	-1.4%	5.3%	32.3%	9.0%
CY 2015	-5.6%	2.7%*	-6.4%	8.5%

Source: Bloomberg, Morgan Stanley Research, Data as of December 15, 2015. *Data as of September 2015.
Past performance is no guarantee of future results.

4. Think stocks, not sectors

In 2015, sector selection did not matter much. Compared to the last few years, inter-sectoral performance deviation was much lower *(Display 4)*. Investor commentaries often focus on how sector allocation hurts or helps overall performance. But for an investor, we believe the basic unit of thinking should be an individual stock.

Display 4: **Inter-sectoral performance deviation of BSE 100 Index**



Source: Bloomberg, Barclays Research. Data as of December 14, 2015. BSE 100 Index with GICS classifications for sectors is used. This is only for Indian market/sectors.

5. Look out for change in the "beholders"

Of the three calendar years with negative equity returns in India in the last decade, 2015 has been the only one where in a falling market, mid-cap stocks have outperformed the large caps *(Display 5)*. Conventional wisdom suggests that in years of negative returns, mid-caps under-perform large-cap stocks owing to higher pressure on earnings and lower liquidity in the markets.

Display 5: **Performance of Large-Caps vs Mid-Caps**

	Annual Returns (in INR)	
	NIFTY 50	**NIFTY Mid Cap**
CY 2006	39.8%	29.0%
CY 2007	54.8%	76.9%
CY 2008	-51.8%	-59.4%
CY 2009	75.8%	99.0%
CY 2010	17.9%	19.2%
CY 2011	-24.6%	-31.0%
CY 2012	27.7%	39.2%
CY 2013	6.8%	-5.1%
CY 2014	31.4%	55.9%
CY 2015	-7.0%	2.8%

Source: Bloomberg, Morgan Stanley Research. Data as of December 15, 2015. **Past performance is no guarantee of future results.**

[5] Gold: Until 2004 USD Gold Prices have been converted into INR (Indian Rupee) using the prevailing exchange rates, from 2005 onwards MCX (Multi Commodity Exchange) traded Gold prices have been used. Property: Annual returns for top seven cities in India, JLLREIS. Equities: Returns of BSE 100. Fixed Deposit: Returns are calculated using SBI (State Bank of India) 1 Year deposit rates.

In our June 2013 article titled *Beauty and the Beholder*, we highlighted how a few stocks had disproportionately contributed to market performance since the year 2008, driven both by superior earnings growth and a significant re-rating. These "market darlings" had seen continued buying from foreign investors. In 2015 we saw some reversal in the fortunes of these companies, the result of a combination of fundamental reasons and the fact that the "beholders" in the markets were changing. Net foreign purchase of equities, at USD 2.7 billion, was far lower than net domestic institutional buying at USD 9.7 billion,[6] for only the second time since the financial crisis. When the beholders change, the idea of beauty changes as well.

6. Good macro does not equal good markets

The year 2015 stands in sharp contrast to 2012. The former was a good year for macro, as measured by the four key parameters of GDP: growth, inflation, current account balance and fiscal deficit *(Display 6)*. But this did not translate into spectacular returns in the stock markets. In comparison, almost nothing went right on the macro front in 2012, but it marked a great year, with the Indian markets (BSE 100) returning 30 percent.[7] The Reserve Bank of India cut rates by 125 basis points[8] during 2015, yet the yield on benchmark 10 year G-sec (government bonds),[9] which was at 7.86 percent as at end 2014, was hardly changed at 7.79 percent as we write this. In the short term, macroeconomic fundamentals may not have a positive correlation with market returns.

Display 6: **Comparison of India's key macro parameters**

	F2012	F2013	F2015	F2016E
Real GDP (old series)	6.3%	4.5%	5.5% E	6.1%
Consumer Price Inflation	8.4%	10.2%	6.0%	4.7%
Fiscal Deficit as % of GDP (consolidated)	8.0%	7.1%	6.4%	5.8%
Current Account Balance as % of GDP	-4.2%	-4.7%	-1.4%	-1.0%

Source: CEIC, CSO, Morgan Stanley Research Estimate.

7. The effects of being in a bad neighborhood

Emerging markets (EM) had another bad year, which compounded the fact that trailing returns for the MSCI EM Index[10] on both a 3- and 5-year basis are now negative. While many commentators expected India to stand out, it has not been easy at all. Despite the fact that India is what we consider a good house, there was no denying that it was in a bad neighborhood and in the short term, it is the perception of the neighborhood that dominated in determining returns.

8. Evidence triumphs over hope

Equity investors take pride in buying ahead of a turn in the indicators that are relevant for a particular stock. Making bets ahead of a budget while attempting to forecast tax rate changes, or buying stocks in the hope of a rural India pick up, or in hopes of a capital spending turnaround, or an asset quality improvement for banks, has simply not worked in 2015. In contrast, if one had picked up stocks based on ground realities or what we call evidence, the returns would likely have been much better. Beware of story-telling; keep your nose buried in evidence.

9. Patience is a virtue

In our April 2013 article *India's Stealth Game Changer* we highlighted that oil prices could fall owing to technological advances and new sources of oil. We had identified cheaper fuel as India's stealth game changer. It took almost 15 months for our thesis to play out when oil decisively cracked in June 2014. Today, oil prices are at one-third of their peak in 2014. The lesson learned here is that when it comes to macro trades patience is a virtue.

If you believe in the fundamentals behind a macro call, it is very likely that prices won't follow the expected pattern for a long period of time, but when they do play out it could be swift and steep. Such was the case with oil; it diverged from other commodities like coal, iron ore and steel as it stayed higher for longer, but eventually caught up *(Display 7)*.

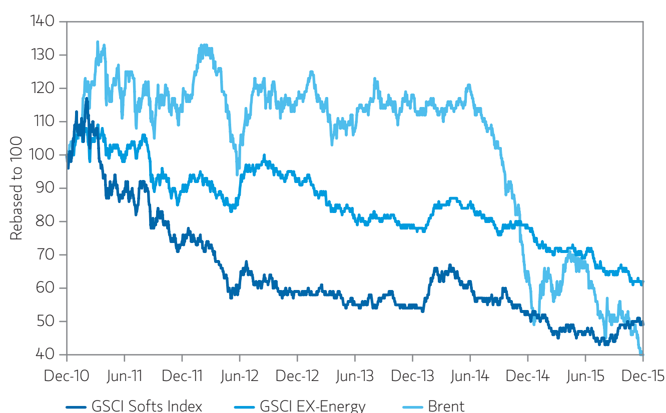
[6] Source: SEBI, BSE, Morgan Stanley Research. Data as of December 14, 2015.

[7] Source: Bloomberg. Data as of December 31, 2012.

[8] Source: Reserve Bank of India.

[9, 10] Source: Bloomberg. Data as of December 15, 2015.

Display 7: **Downfall in Commodities**



Source: Bloomberg. Data as of December 15, 2015.
Past performance is no guarantee of future results.

10. Post facto narrative fallacy

Every year the markets are caught up in the narrative fallacy surrounding hyped up events. The liftoff by the U.S. Federal Reserve was one such event. Closer to home, the actions of the Modi government have been seen by supporters and critics very differently, a point we highlighted in our essay on the dangers of the echo chamber. The story on oil is playing out quite similarly. Most analysts are highlighting why oil prices should head even lower, the typical reasons being glut of supply and weak economic growth. We would not be surprised, had oil prices remained at elevated levels, if the same analysts would have been talking about the tensions in Syria and other parts of the Middle East, and pressures on the fiscal balances in Russia, or OPEC (Organization of the Petroleum Exporting Countries) members' cartelization to justify higher oil prices. Finding a story to fit the facts is an engaging but useless pastime.

At the risk of sounding like a broken record, we think India is on a path for gradual and uneven recovery and just because a calendar year has changed does not mean that reality will change. One's investing style should remain the same in that one should look for growth inflections that seem durable and look for high quality stocks within those spaces. This is not about finding the next big macro trade but as Peter Lynch neatly summarized, "the person that turns over the most rocks is going to win the game".

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The MSCI U.S. Index is designed to measure the performance of the large and mid cap segments of the U.S. market.

The MSCI Europe Index is a free float-adjusted market capitalization index that is designed to measure developed market equity performance in Europe. The term "free float" represents the portion of shares outstanding that are deemed to be available for purchase in the public equity markets by investors. The performance of the Index is listed in U.S. dollars and assumes reinvestment of net dividends.

The MSCI India Index measures the performance of the Indian equity market.

The MSCI China Index captures large and mid-cap representation across China A-shares, B-shares, H-shares, Red-chips and P-chips. It reflects the Mainland China and Hong Kong opportunity set from an international investor's perspective.

The MSCI Emerging Markets Index (MSCI EM) is a free float-adjusted market capitalization weighted index that is designed to measure equity market performance of emerging markets.

The BSE-100 Index is a broad-based index formerly known as the BSE National index. The BSE-100 Index is calculated taking into consideration only the prices of stocks listed at BSE.

The Nifty Midcap 50 Index captures the movement of the midcap segment of the market. The index comprises 50 stocks listed and is also available for trading in F&O segment at National Stock Exchange (NSE).

The NIFTY 50 index is National Stock Exchange of India's benchmark stock market index for Indian equity market.

The S&P GSCI Softs index is a sub-index of the S&P GSCI that measures the performance of only the soft commodities, weighted on a world production basis. In 2012, the S&P GSCI Softs index included the following commodities: coffee, sugar, cocoa and cotton. The S&P GSCI Softs index is also a sub-index of the S&P GSCI Agriculture index.

The S&P GSCI Non-Energy Index provides investors exposure to all commodities not included in the Energy sub-index.

Connecting the Dots

The Invisible Hand of the "Start-Up" Economy

A one-tonner compact truck slowly makes its way into a quiet residential neighborhood at 7am on a Sunday morning. The "it's too good to be true" expression of the Bollywood star promoting the upcoming online grocer, printed on either side of the body of the truck, reveals what might be inside. A delivery boy carrying a few crates steps out. A quick search on my smartphone with key words "delivery boys for e-commerce companies" on a popular job hunting website yields 55,000[1] plus vacancies!

Bypassing big-box retail

Not so long ago the retail sector gurus presciently told us that the local "kirana" store would make way for big-box retail outlets. The lure of "everyday low prices" (Walmart's popular tag-line), we thought, would entail a drive to the outskirts of the city every weekend. The story played out quite differently, thanks to government policies ostensibly meant to protect the small retailer. More importantly the battleground had already begun to shift online, as India seemed to by-pass big-box retail in favor of online e-commerce.

This was not the first time India leapfrogged Western trends. The lead-lag between trends in the developed and emerging countries has been crunched, if not eliminated entirely, or even reversed. Looking at trends a decade or two ago in the Western world may not be instructive for predicting the future in the emerging world. The telecommunications sector is one oft-quoted example. Land-line penetration in India never crossed 19 percent[2] as inefficiently run state-owned

[1] Source: Shine.com

[2] Source: TRAI, Telegeography, Kotak Institutional Equities. Data as of March 31, 2005.

enterprises could not keep pace with demand. Mobile subscribers, on the other hand, stand at 988 million,[3] with the majority of subscribers, particularly in rural India, having never owned a land line connection. Or consider internet access. It is estimated that there are 302 million[4] internet users in India, of which almost 283 million access the internet solely on mobile phones. Many of these internet users may never have used a desktop computer. And, in the not so distant future, many mobile internet users may leapfrog 3G networks and move directly to 4G.

The invisible hand

The "invisible hand" is a phrase coined by Adam Smith[5] in his book, *An Inquiry into the Nature and Causes of the Wealth of Nations,* to describe the unintended social benefits resulting from individual actions. According to Smith, by pursuing self-interest, an individual promotes the interest of the society more effectively than if it was done intentionally. The invisible hand is the underlying foundation that guides free markets and capitalism.

In this essay, we attempt to touch upon how start-ups are creating novel and disruptive business models that could have far reaching implications on society. From the churn in India's billionaires list to the way the middle class saves and consumes, and from encouraging a "start-up" culture to creating employment opportunities in new ancillary services, the "invisible hand" is creating new paradigms.

Dreaming big

The new generation entrepreneurs dream big, pitch investment cases to global venture capitalists, challenge old-economy business models and seek to change ingrained customer behavior. They are in no hurry to list their companies in the public markets so long as both valuations and the flow of funds in the private markets continue to be attractive. As Farhad Manjoo recently put it in the *New York Times,*[6] unlike the dot-com boom of the 1990's when the holy grail for a technology company was to go public with an initial public offering (IPO), this time around all efforts are being made to remain private.

Unlike the old economy players, these entrepreneurs realize that they are in a business with high mortality rates, and hence they need adequate funding. They do not mind diluting their stake to minority levels if the business needs capital. When we quizzed the founder of one of India's largest e-commerce companies if he does not worry that his stake, after factoring in all the convertible preferential shares issued to various private equity funds in multiple rounds of funding, might be less than 10 percent, pat came the reply "a small piece of a big pie is better than a large piece of a small pie."

This is in sharp contrast to many family-run infrastructure and real estate companies which are currently experiencing a crisis in their over-leveraged balance sheets, but had shied away from raising equity in better times because the family patriarch did not want to see the family's ownership stake fall below 50 percent. As the head of one of the prominent investment banks in India recently told us, many Indian promoters in the 1990's faced a crisis because they lacked globally competitive technology and scale. In the next decade they tried to set that right, but failed to get the capital structure right. They attempted exotic structured financing to avert the promoter stake from falling below 50 percent, but in the process found it difficult to face a downturn. Many of these today are languishing as non-performing assets for banks, with promoter equity almost eroded after factoring in the pledged assets and exotic structured financing deals. It does appear that the new generation e-commerce entrepreneurs recognize the imperative to raise risk capital and stay away from debt.

E-commerce is a new driver of foreign direct investment

Private equity funding from global funds gets classified as foreign direct investment (FDI). While the term FDI conjures up images of large dollops of capital from multinationals with deep pockets investing in long gestation projects in India, the fact is that many of the grand announcements such as a Korean steel major proposing a US$12 billion[7] steel plant have remained a pipe dream. The FDI in retailing from the likes of a furniture retailer company too has taken much longer to bear fruit owing to regulatory challenges.

It is the relatively smaller ticket investments from private equity funds that have made their way into India as FDI investments in start-ups that have now grown to meaningful amounts when added up. Official aggregate numbers are difficult to get because the FDI in internet and e-commerce companies get diffused under different sector heads. However, a bottom up analysis of deal sizes over US$ 5 million announced last year adds up to almost US$ 5 billion,[8] contributing more than one-sixth of overall gross equity FDI inflows. Considering that India's FDI this year might exceed its current account deficit, thus reducing its external vulnerability meaningfully, the role of start-ups in improving India's macro-economic situation should not be under-appreciated.

[3] Source: TRAI, Kotak Institutional Equities. Data as of August 31, 2015.

[4] Source: TRAI, Kotak Institutional Equities. Data as of March 2015.

[5] Adam Smith (1776). *An Inquiry into the Nature and Causes of the Wealth of Nations*. London: W. Strahan and T. Cadell.

[6] Farhad Manjoo. July 1, 2015. As More Tech Start-Ups Stay Private, So Does the Money. *The New York Times*.

[7] Posco puts on hold $12 billion India plant, delayed since 2005. July 16, 2015. Bloomberg.

[8] Source: VCcircle, Crunchbase, Jefferies. Data as of March 2015.

Winner takes it all

Entrepreneurs in the e-commerce and technology space are executing business plans at break-neck speed. It is considered to be a winner takes all market, and being number two is as good as being irrelevant. Take the case of the smartphone industry. According to a recent article in *The Wall Street Journal*,[9] the top player makes 92 percent of worldwide smartphone industry profits. The next player makes 15 percent, implying more than 100 percent share of profits for the top two players. Effectively this highlights some important facts. The number one player makes almost all the profits, the number two gets some share and the rest of the players are bleeding. This explains the cut-throat competition amongst e-commerce players to reach the top spot.

Contrast that with the Small Scale Industries (SSI) policies of yore. There the entrepreneur took shelter in items reserved for the SSIs. The perverse incentive was to remain small and keep investments below the threshold level rather than improve technology and build scale. Funding came from institutions such as the Small Industries Development Bank of India (SIDBI) or banks that lent more to meet priority sector norms, and not because they believed in the business viability. Over time, as the items progressively came off the reserved list, the SSIs found it difficult to survive.

The new billionaires

The churn in the *Forbes* list of billionaires is instructive. In the late 1990s, IT czars like Azim Premji and Narayana Murthy featured in the billionaires list and were the role models for young aspiring entrepreneurs. The *Forbes* billionaires list saw new entrants in the forms of real estate, mining and "infrastructure" barons after the tech bust in 2000 eroded wealth of the technology and media entrepreneurs. Now with the crash in commodity prices and slowing demand in real estate, these mining and real estate barons are again yielding, this time to entrepreneurs from the healthcare and knowledge sectors. With the co-founders of an e-commerce company each making it to the 2015 Forbes[10] list of Indian billionaires (ranked at #86, net worth at US$1.3 billion each), it motivates every start-up founder to aspire for more, just like the IT services sector did in the 1990s.

Sociological impact across income strata

Most of what we have discussed so far has already been well documented. The young entrepreneurs ready to take on the world have been in the media limelight. However, what is often missed out are the changes that are happening across multiple income strata in society, beyond the billionaires and the entrepreneurs.

Consider the long-term implications when retail shops located in high street malls shut down because customers are buying online. The online store does not need to rent expensive property at premium locations. Instead, all it needs is a warehouse on the outskirts of the city with an army of "delivery boys" on motorcycles fulfilling the last mile.

The young entrepreneurs of start-ups want to focus on their expertise and are willing to outsource activities that are peripheral to the core. Logistics, accounting services, and a host of other ancillary services which are getting outsourced in turn create an ecosystem of new start-ups. This ignites a virtuous cycle of entrepreneurship. Within our own circle of friends, we hear of young professionals who are giving up salaried jobs to start up their own ventures. Hitherto happy with a cushy job, they are willing to explore life in a start-up. Beyond the entrepreneurs, this also throws open many interesting opportunities for employment, such as the vacancies for delivery boys mentioned earlier.

How will Indians consume, save and invest?

From entry-level jobs to the most successful entrepreneurs in the country, there is a shift from "old wealth" to "new wealth." The "old wealth" represents wealthy individuals or families that were well positioned to disproportionately benefit from asset inflation in the last decade or more, with the bulk of their wealth primarily invested in non-financial assets like gold and property. The "invisible hand" in the new economy is redistributing wealth, "from the mining baron to the e-commerce entrepreneur" and "from the landlord to the delivery boy."

We would like to believe that recent trends in "financialization" of savings represent a new and different way the youth in India will save and invest. The lure for saving in physical assets like property and gold will make way for financial assets—equities or fixed income. The youth will look at physical assets as too cumbersome to buy and manage, as having limited productive use and yielding lower returns. Over the last seventeen months, equity mutual funds have seen consecutive net inflows, the longest streak of inflows since data is available from the year 2000.[11] While it may not be wrong to assume that bulk of these inflows came from a bunch of high net worth individuals, what is more interesting is the trend of increasing registrations for Systematic Investment Plans (SIPs) among mutual fund investors. SIP registrations are up almost 40 percent from a year ago, to about 7.6 million accounts.[12] A SIP is defined as an option offered to mutual fund investors allowing them to invest small amounts periodically, usually on a fixed day every month, instead of lump sums. This is a plan ideally suited for retail investors wanting to create long-term wealth in the equity markets without trying to time entry and exit.

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[9] Apple's Share of Smartphone Industry's Profits Soars to 92%. July 12, 2015. *The Wall Street Journal*.

[10] India's 100 Richest People. September 2015.

[11] Source: SEBI, BSE, Morgan Stanley Research. Data as of October 30, 2015.

[12] Source: CAMS, Morgan Stanley Research. Data as of June 30, 2015.

As investors in public markets, a simple barometer we use to predict trends is to look at the line-up of companies that are raising money from the capital markets through IPOs. After all these usually represent companies from sectors that are witnessing above-average growth rates and need funding.

Retail logistics, healthcare services, airlines and coffee retailing represent the current line-up. A decade ago this would have been dominated by real estate and road builders. Almost two decades ago it was information technology and media companies. The current line-up of IPOs highlight that India is witnessing a changing pattern of consumption.

The largest consumer staples company in India struggled to grow volumes despite price cuts and higher spending on advertising, as per the latest reported quarterly numbers. In contrast, one of the largest online marketplaces in India is reported to have quadrupled their sales during the festive Diwali season. So it seems consumers are stepping out to have coffee, flying out for vacations, buying smart phones or watching more movies. Hindi and English movies box office collections in India last quarter were the highest on record.[13]

To conclude, the invisible hand of the start-up economy is at work. This will have far reaching implications to society at large, beyond just the entrepreneurs. To use a quote from the American philosopher and writer Alan Watts, “the only way to make sense out of change is to plunge into it, move with it, and join the dance.”

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[13] Source: boxofficeindia.co.in.

Connecting the Dots

Reverberations In an Echo Chamber

As we look back at the outcome of the state elections in Bihar,[1] one thing is very clear: it was extremely difficult to predict the outcome based on opinion and exit polls. In fact, most polls predicted a very thin margin of the vote share difference between the two major opponents. The outcome of the elections may seem obvious; behavioral scientists call this the hindsight bias or "knew-it-all-along" effect and political analysts are busy dissecting the numbers and attributing reasons for the victory and the loss.

However, what struck us was how in the run up to the election results, those who had a strong pre-existing bias on the outcome of the result, seemed to seek out data that confirmed these pre-held notions. This bias is popularly known as confirmation bias. A quote attributed to British politician Hugh Molson puts this well—"I will look at any additional evidence to confirm the opinion to which I have already come."

It is natural human tendency to seek out information that fulfils our desire to validate our view, so we actively look for people whose views seem to match ours. We selectively consume newspaper articles that appeal to our thinking. We watch those television channels that agree with our view. And we read opinion pieces and editorials in newspapers and magazines that have a similar leaning to ours. This puts us into what we call an "echo chamber", where similar views are repeated and reinforced, and contrary views are under-represented or brushed aside as frivolous or biased. The Wikipedia definition of an echo chamber is "a situation in which information, ideas, or beliefs are amplified or reinforced by transmission and repetition inside an "enclosed" system, where different or competing views are censored, disallowed or otherwise underrepresented."

[1] Bihar is a state in eastern India.

While this might sound bad enough, modern day social media filtering has made it worse. Once we have made a few initial choices that reveal our leaning, social media will systematically find ways to ensure that we are fed with more of what we find appealing. Consider these examples. Our Facebook feed is filtered based on previous history of "likes." Amazon suggests books to buy based on our patterns of previous purchases. Twitter suggests whose tweets we should "follow" based on those we are already following. It almost seems like the popular Hutch (Vodafone) Mobile advertisement of a dog that follows his master (a young boy) with the punchline "wherever you go, our network follows." In this case, the "network" ensures you are fed with more of the same, almost to the point where our brains start confusing opinions for facts. In short, the online world has magnified the decibel level of the reverberations in an echo chamber manifold.

Whether the constant reinforcement of similar viewpoints makes us more intolerant as a society, a hotly discussed subject these days, is for sociologists and news channels to debate! However, what we attempt to do in this essay is to see how in the world of business and investing, we fall prey to confirmation bias.

Nassim Nicholas Taleb says in his popular book, *Black Swan*,[2] that you do not reach the conclusion that all swans are white by looking for one more white swan. Before the discovery of Australia, people were convinced that all swans were white. This was an unassailable belief confirmed by empirical evidence. However, one single observation to the contrary invalidated a belief derived from millennia of confirmatory sightings of millions of white swans. Unfortunately, that is not the way we typically function. In fact, we do quite the opposite, which is to form our view and then spend the rest of the day finding all the information we can to support it.

In organizations, it is not uncommon to see a lack of diversity in views. This often emanates right from the top—i.e., the Board of Directors. Independent directors provide a good opportunity for senior management/owner-promoters to instil a diversity of views, but more often than not it is filled with "yes men." In the investing world, there is a tendency to selectively listen to analysts whose investment ideas match our views. In short, we seek to derive comfort in the echo chamber.

To conclude, as Austrian-British philosopher Karl Popper said, the only way of testing a hypothesis is to form a view and to spend the rest of the day looking for evidence that proves you are wrong, a process known as falsification. Good decision makers should consciously seek out diverse views that challenge their existing opinions.

[2] Nassim Nicholas Taleb (April 2007). *The Back Swan: The Impact of the Highly Improbable.* U.S.: Random House, UK: Allen Lane.

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Connecting the Dots

Why We Write

There is a Chinese saying that the faintest ink is more powerful than the strongest memory. This is a simple truth about writing things down so that one does not have to rely on memory alone for recollection. Yet, this is lost on many, especially in the investing world. We were fortunate that early on in our careers we worked under bosses who made us write down stock investment theses, ideally not extending beyond a few bullet points. To borrow a line from Warren Buffett,"this is simple but not easy". We have spent many a morning at our desks trying to write an honest rationale for a stock that we have fallen in love with, only to toss out sheet after sheet into the waste paper basket.

From our perspective, a stock rationale should have three parts. First, there should be a description of the key business advantages. Some people call this the moat around a business and the description should also include a view on sustainability of these advantages. Deep distribution reach, low cost of production, sustained pricing power or Intellectual Property Rights on a product or service are some examples. One should also look for metrics that reinforce this description of moat like market share and change in market share, superior profitability or return ratios.

Second, there has to be a description of the business drivers for next 12–18 months. If the moat is about the structural advantages, this part is more about cyclical changes that one is expecting. Again this has to be quantified with measurable metrics like expected sales growth, operating margin, earnings, return on equity etc.

Third, it should be clearly defined where one differs from consensus market expectations. If the rationale reads like a consensus report then it is quite likely that all the good things are in the price. In our opinion, an ideal investment opportunity comes along when a solid moat is clouded by short term challenges and the market decides to focus more on the challenges than the structural advantages.

Rationales should end with a 'review' price, as opposed to 'target' price, which is one's estimate of what the fundamental value of the stock should be, based on current information. The emphasis here is on review price rather than a target price because the latter merely denotes an exit price for the stock, whereas often the process of evaluating an existing investment involves periodic review, as and how goal posts are achieved.

The biggest advantage of writing things down is that it forces one to rummage through data to back one's argument. For good measure, send your rationale to a large number of people. Putting it out there for all to see makes one more accountable and hence careful. Writing things down also helps weed out half-baked ideas at the initial stage itself before they can damage the portfolio. Often, one comes out of corporate meetings where a Chief Executive Officer with great presentation skills has held sway and enthralled you. The halo effect creates an urge to press the buy button then and there but writing down the investment thesis acts as a circuit breaker. What felt like a no-brainer a few moments ago, does not feel that way once the rubber hits the road or in this case, the pen hits the paper.

Having clear operational metrics with every rationale helps measure actuals against expectations. Thus, every quarter when the relevant data points come out, it is essential that the original rationale is revisited to see if the thesis is on track or needs re-assessment. To be sure, one does not have to be robotic about this; that is, just because a metric is not reached, a stock has to be automatically sold but the process of re-assessment is critical. In investing, stock theses will inevitably go wrong and such timely assessments helps in limiting the likely damage from slow poison and steering clear of value traps. In the happy instances where the review price has been reached, it is important to see whether this has been reached primarily through re-rating or because operational metrics surprised on the upside. If it has been mainly through operational outperformance, setting a fresh review price is easier.

Filtering out the signal from the noise is possibly the most difficult skill that an investor has to master. In times of volatility when emotions and headlines tend to hold sway over one's thinking, re-visiting the rationale to see how much of it affects the original thesis has a calming effect. It is surprising on how little an impact, daily breaking news has on such rationales. Also, during times of volatility, some potentially great bargains may become available. If one has a review price handy for such stocks (this time lower than then market price), buying things when there is blood on the street becomes easier.

Unlike sportspeople, investors do not have sophisticated frame by frame action replays to correct flaws and improve technique. Having a collection of rationales written over time is the best that we have and a record of one's own thought process helps unearth biases and mistake patterns. Being cognizant and rectifying them will go a long way in accelerating one's evolution as an investor. Also when the chips are down, it is a morale booster to read an old rationale that played out well and gave large returns.

The most frequent sentiment that we get from investors is that "We are numbers people, not writers!" but all it takes is lucid articulation of thoughts in simple language. And as regular readers of this newsletter will agree, one does not have to be a Hemingway[1] to write about investing.

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Connecting the Dots

On the Right Track

"When France sneezes, the rest of Europe catches a cold" is a nineteenth century quote attributed to Austrian Chancellor Klemens Von Metternich. Since then, we have heard variants of this quote with the words "France" and "Europe" being replaced most commonly with 'the United States' and 'the rest of the world'. More recently as global markets entered into a tailspin, the focal point seems to have been a 'sneeze' from China.

It is human tendency to rely on causal reasoning to explain every event. As global markets took a nosedive last week, the most proximate cause attributed to the event was the woes in the Chinese stock markets. Interestingly, on one of the local channels in India, a 'market expert' attributed the volatility specifically to the weak Chinese PMI data reading as the 'real reason' for the crash; others blamed the devaluation of the Chinese Yuan.

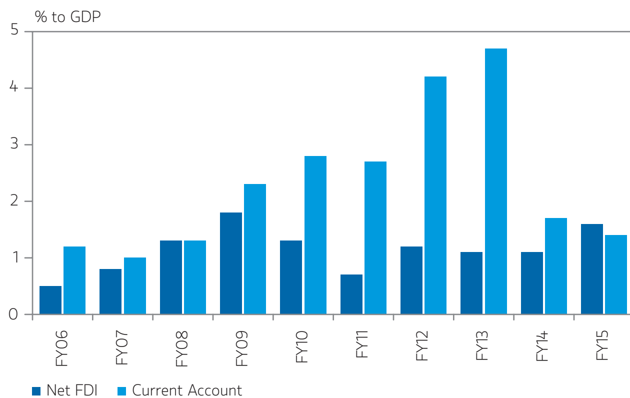
Whatever might have been the "cause" of the crash, it has reinforced the fact that India is not immune to shocks in global markets. Not surprisingly, the sentiment in markets also seems to define the popular perception about the effectiveness of the government's economic policies. Immediately after the general elections last year, it was widely held that India would embark on major structural reforms and the markets zoomed in anticipation. In fact, it would be naive to assume that the government would embark on economic B-HAGs (big hairy audacious goals) immediately after assuming office. Now, as we speak to political and economic commentators, the mood seems to have swung to the other extreme as a sense of fatigue and déjà vu has set in with this government.

As long term investors in the markets, our view has been that as sentiment gyrates between extremes, the truth often lies somewhere in the middle. In this context, it is worth cutting through the noise to look at five trends that characterise the current economic situation in India. In our opinion, these trends are not fleeting, and will gain further strength in the coming months and years.

1. Fragile no more

India's external vulnerability has significantly diminished. Foreign direct investment (FDI) has for the first time in seven years exceeded the current account deficit *(see Display 1)*. While more can be done to make it easier to attract FDI, India today does appear to be in a sweet spot in the FDI-Current Account equation making if far less vulnerable as compared to 2013.

Display 1: **Improving FDI-Current Account equation**



Source: CEIC, Nomura Global Economics. Data as of March 31, 2015.

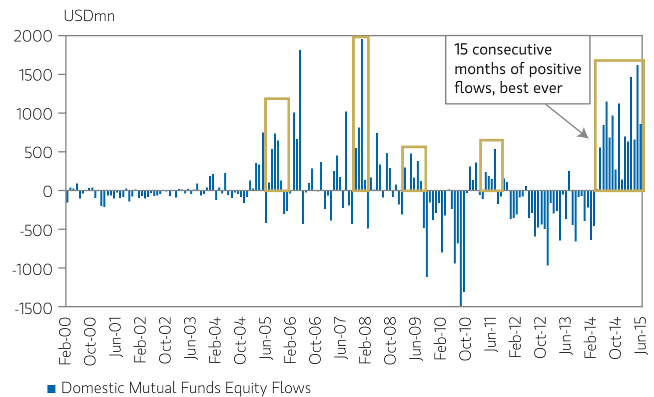
2. Gradual and uneven

In our view, economic recovery will be gradual and uneven. It has been hard to pinpoint specific reasons, but one witnesses buoyancy in some pockets and continued sluggishness in some others. A case in point is divergent growth trends between relatively good growth in scooters versus sluggishness in motorcycles. While motorcycle sales have been flattish compared to five years ago, scooter sales are up more than 2.5 times.[1] However, it is our contention that despite different economic indicators throwing confusing signals, the economy is undoubtedly bottoming out. The pace of recovery will likely be slower as the tailwind of strong global growth that existed in the past is now missing.

3. Financialization of savings

There are early signals of household savings shifting from physical savings (gold and property) to financial savings. Domestic mutual fund flows into equity markets have been positive for 15 consecutive months in a row. This makes it the longest streak of net inflows since the year 2000 when data on fund flows is available *(see Display 2)*. In contrast, India's gold imports have shrunk by about US$25bn from the levels in 2013.[2] Similarly, property demand continues to remain sluggish, with RBI's pan-India index for residential property prices indicating, at best, meagre price increases.[3]

Display 2: **Strong buying by domestic mutual funds**

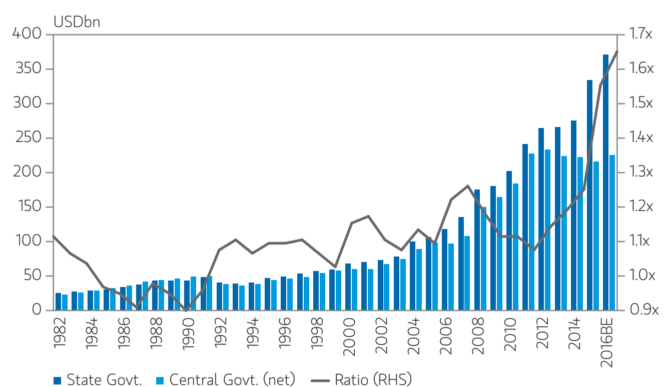


Source: SEBI, BSE, Morgan Stanley Research. Data as of July 31, 2015.

4. Rise of the states

Earlier advertisements from state governments rarely went beyond the statutory tenders or appointments. If at all they were typically related to tourism. That has now changed with States advertising their potential as an investment destination. State's share in the Centre's tax receipts have risen from 32 percent to 42 percent based on recommendations of the 14th Finance Commission.[4] As per a recent Credit Suisse report, the cumulative spending of states is now 1.6 times that of the Centre *(see Display 3)*. How each state will use the increased tax allocations will be an interesting trend to watch, as extra money in the hands of states usually finds its way into the economy.

Display 3: **Share of state governments' expenditure on the rise**



Source: Union Budget Documents, RBI Study of State Finances, States' FY16 Budget Documents', Credit Suisse. Budget Estimates as of March 31, 2016.

[1] Source: SIAM, Motilal Oswal Research. Data as of July 2015.

[2] Source: CEIC, Nomura Global Economics. Data as of March 31, 2015.

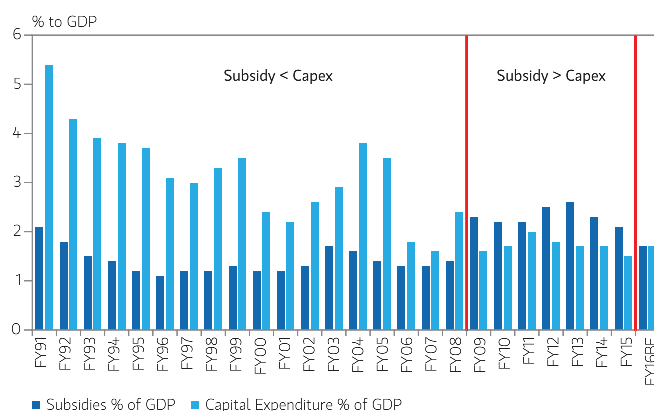
[3] Source: Recent Trends in Residential Property Prices in India, Reserve Bank of India, May 2015.

[4] Source: XIV Finance Commission Report, February 2015.

5. From doles to capex

After seven consecutive years of spending more on subsidies than capital expenditure, this year the government is likely to spend an equal amount *(see Display 4)*. This will be a big positive, particularly if the trend of lower subsidies and higher capital expenditure continues in the coming years. In the first quarter of fiscal 2015 to 2016, capital expenditure is up 18 percent year on year, led by spending on road, railways and defence.[5]

Display 4: **Lower subsidies to make way for higher capital expenditure**



Source: Budget Documents, CEIC, Nomura Global Economics. Budget Estimates as of March 31, 2016.

To conclude, in our opinion India will always be a "two-step forward followed by one-step backward" story. When markets are euphoric and extrapolate positive trends, it is time to be cautious and vice versa. As we look through some of the criticisms from the cynics on India and compare notes with our views on trends noted above we are reminded of a quote by Joan Robinson,[6] "Whatever you can rightly say about India, the opposite is also true." We continue to believe, amidst the skepticism, that India is on the right track.

[5] Source: CEIC, Nomura Global Economics. Data as of June 30, 2015.

[6] Joan Robinson was a British economist who made many contributions to economic theory. The quote is retrieved on August 28, 2015 from Amartya Sen's article in 'The Economist' dated November 18th, 2005.

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Connecting the Dots

FDI: One Swallow Doesn't a Summer Make

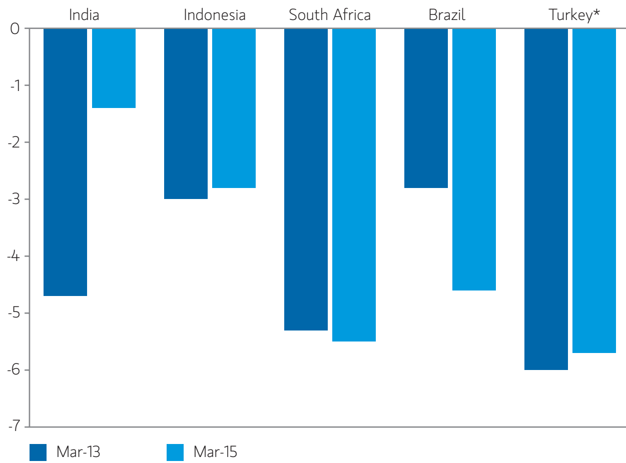
There is an old adage that bull markets climb a wall of worry but having climbed one wall, it is the nature of markets to worry about the next one. It is sometimes instructive to think back about the walls that were encountered in the past and how they were scaled. A formidable one that the Indian markets recently faced was post what is now called "taper tantrum" in 2013. With high current account and fiscal deficits, India was grouped with four other such emerging markets as the infamous Fragile Five. Two years later, we find that India is out of that group and better prepared to deal with the situation once the U.S. Federal Reserve decides to hike interest rates.

Indeed, India's Current Account Deficit (CAD) has shrunk from 4.7 percent of GDP in 2013 to 1.4 percent last year, which is by far the best adjustment amongst the Fragile Five countries *(See Display 1)*. What is even more heartening is the fact that India's dependence on volatile portfolio flows to fund her CAD has diminished. Net Foreign Direct Investments (FDI) exceeded the CAD for the first time since F2008, signifying that the deficit is now funded with stickier capital *(See Display 2)*. The improvement in FDI is noteworthy with the United Nations Conference on Trade and Development (UNCTAD) estimating that India jumped six ranks to ninth position in 2014 in the FDI league tables.[1]

[1] World Investment Report 2015 by United Nations Conference on Trade and Development (UNCTAD).

Display 1: **India: No More Fragile**

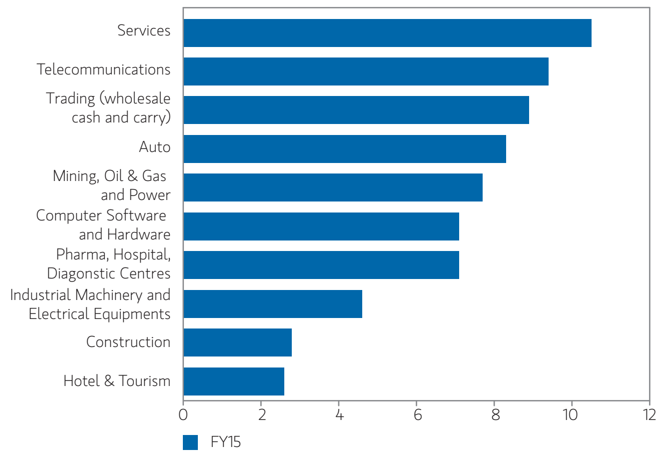
CAD (as a % of GDP, 12M trailing)



Source: CEIC, Bloomberg, Nomura Securities.
*Data as of December 2014.

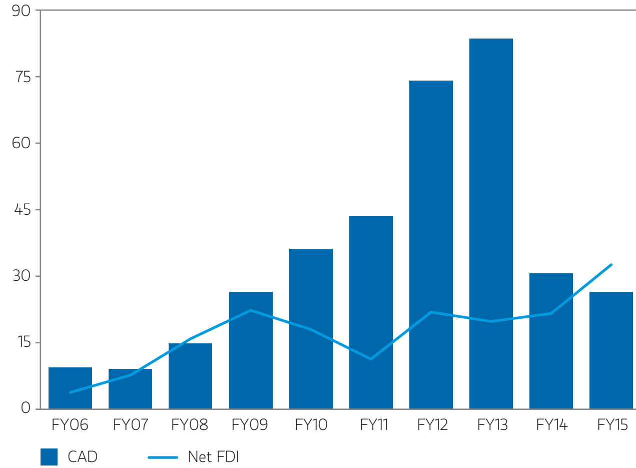
Display 3: **FDI Breakdown by Top Sectors**

FDI Equity Inflows in FY 15 (% share)



Source: DIPP, Nomura Securities. Data as of March 31, 2015.

Display 2: **India's FDI Flows Vs CAD**



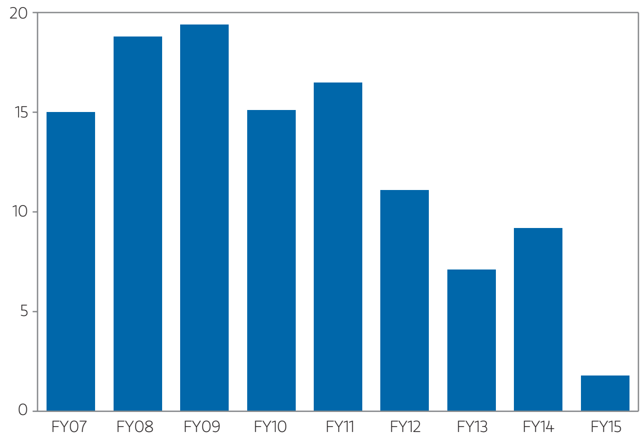
Source: CEIC, Nomura Securities. Data as of March 31, 2015.

Apart from the increase in quantum of FDI, both absolute and as a share of GDP, we found a few other trends interesting.

One, the investments have been granular and well spread across many sectors. This is unlike some of the earlier years when a few deals accounted for a bulk of the inflows, raising questions over sustainability of flows *(see Display 3)*.

Two, net outward FDI (i.e. Indian investments overseas) has reduced to a trickle. From a peak of $19.4 billion in F2009, this has slowed to a mere $1.8 billion in F2015 *(See Display 4)*. It is difficult to attribute this to a single factor, but overseas misadventures of large Indian corporates over the last few years still seem to be weighing on "India Inc.'s" mind. This is important because India has had higher absolute Gross Inward FDI in the past, but the net number was lower due to a large quantum of outward flow.

Display 4: **Net Outward FDI**



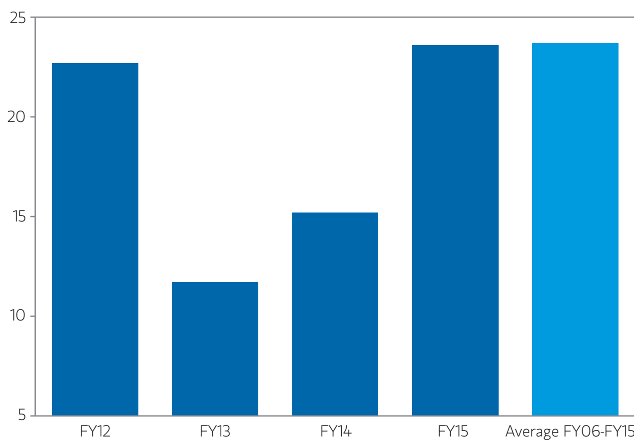
Source: CEIC, Nomura Securities. Data as of March 31, 2015.

Data for sectoral break-up of FDI is available only for the equity component of gross inward flow. Of the $44.3 billion of gross inward FDI in F2015, equity investments accounted for about $32 billion.[2]

The third trend is that the share of infrastructure and real estate within this had fallen to a low of 11.7 percent in F2013 but retraced towards decadal average of 23.6 percent in F2015 *(See Display 5)*. We think this will be an enduring trend with Indian infrastructure assets getting funded through FDI. While this may not be able to fully replace bank funding for infrastructure, it could ease some of the logjam faced in the sector today due to over-leveraged asset developers and capital strapped public sector banks.

Display 5: **Share of FDI in Infrastructure and Real Estate Sector**

Gross FDI Equity Inflows (share, %)



Source: CEIC, Nomura Securities. Data as of March 31, 2015.

Fourth, and possibly the most important trend, is the emergence of a new sector from close to nowhere a few years ago: FDI in e-commerce and internet space. Again, aggregate data is hard to come by and, sectorally, this gets diffused over many heads. However, a bottom up analysis of deal sizes in excess of $5 million completed last year, adds up to almost $5 billion.[3] Thus, almost 20 percent of the gross inward equity inflows were accounted for by this new source. This trend shows no signs of ebbing in the current year with an ever increasing crowd of global tech companies and venture capitalists not wanting to miss the action in the Indian internet sector. Also, as Farhad Manjoo recently stated in the *New York Times*,[4] "unlike the dot-com boom of the nineties when the holy grail for a technology company was to go public with an initial public offering (IPO), this time around all efforts are being made to not IPO and instead remain private." This means that tech companies will likely continue to play in the unlisted space making stickier FDI the only route for foreign participation.

While India is moving towards increasing its participation in global FDI, one has to be cognizant of the fact that a lot still needs to be done to make India an attractive destination for sticky foreign capital. On the World Bank Ranking of Ease of Doing Business, India slipped two places to a low 142 out of 189 countries.[5] India compares itself to China on many economic parameters but FDI is one area where India should actually try and emulate the Chinese example. For the past two decades, China has, on average, attracted net FDI of over 3 percent of GDP compared to just 0.9 percent for India.[6] Today, an electronics company is grabbing the headlines for planning to set up a SmartPhone manufacturing facilities in India, but a steel maker, whose $12 billion steel plant was India's single largest FDI proposal, managed only a small obituary in the back page. The feverish debate around investments by multinational U.S. and Swedish retailers in India's retail space seems to have all but died down and that is not a good sign. The "There is No Alternative" mindset that foreigners will invest in India owing to its large market potential, regardless of red tape and regulatory hurdles, breeds complacency. It may be too early to celebrate the improving trends in FDI and naive to assume that India has already become the capital destination of choice.

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Morgan Stanley is a full-service securities firm engaged in a wide range of financial services including, for example, securities trading and brokerage activities, investment banking, research and analysis, financing and financial advisory services.

[2] Source: CEIC, Nomura Securities. Data as of March 31, 2015.

[3] Source: VCcircle, Crunchbase, Jefferies. Data as of March 2015.

[4] Farhad Manjoo (July 1, 2015). "As More Tech Start-Ups Stay Private, So Does the Money. " *The New York Times*.

Connecting the Dots

Buffett-like Investing With Madoff-like Returns

Just ahead of the annual meeting of Berkshire Hathaway, held last month, an interviewer from *Fortune* magazine[1] quizzed Warren Buffett on what kind of deals he would like to do with almost $60 billion of cash on the balance sheet.[2] In his usual earthy style, Buffett simply said "ones we can understand, where the price is right and we like the management." He said that he cannot narrow down the criteria any further, as it is difficult enough to find investment opportunities that fulfill just these three requirements.

Many investors, overtly or covertly, may aspire to imitate Buffett's style of investing. When clients invest with professional money managers, they too love to hear a well-articulated investment philosophy and process, and if it sounds like the "Buffett style of investing," even better. However, this essay does not purport to be one more analysis of what makes Buffett's investing style click. There are countless books and columns that have already attempted to do that. Also, we do not intend this piece to be taken as a recommendation for any companies Buffett has invested in or for Berkshire Hathaway. Rather, it tries to bring to the fore how investors (and their clients), while wanting to imitate "Buffett-type" investing, simultaneously want to achieve near perfect "Madoff-type" consistent returns. And no matter how good an investor one is, the two simply cannot co-exist.

Bernie Madoff, sentenced to a 150-year prison sentence in 2009 for running what was a $65 billion Ponzi scheme disguised as an investment vehicle, had clients queueing up to invest for many years. Fairfield Greenwich's Sentry Fund, a feeder

[1] "The 3 things Warren Buffett looks for in a deal" (May 3, 2015).

[2] Source: Berkshire Hathaway Inc., Annual Report 2014.

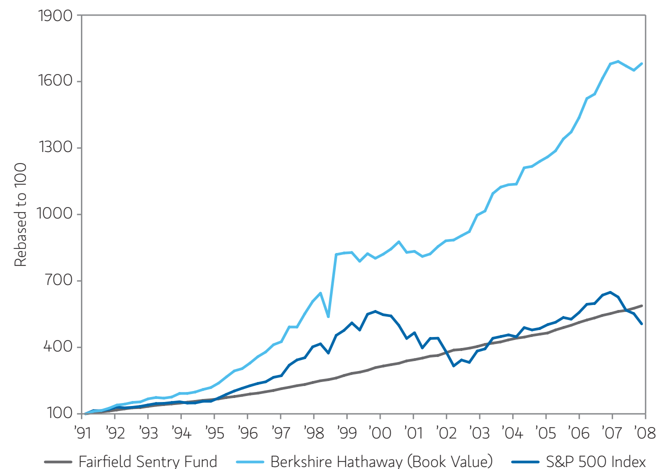
fund that had invested its entire corpus with Madoff, serves as a good proxy for his track record. In almost 18 years of running the fund, Fairfield[3] beat the S&P500 Index by about 2 percent annualized. More importantly, it boasted of 92 percent positive return months with annual volatility of only 2.5 percent, compared to the S&P 500 Index's volatility of 14 percent! And yes, investors believed that. Of course, we now know that there were no real investments in Madoff's fund and it was all a Ponzi scheme, but just the stability of returns is what likely lured clients into investing in Madoff's fund.

Contrast this with the performance of Berkshire Hathaway which we will use as a proxy for Buffett's investing approach. Bear in mind that the performance of Berkshire Hathaway shares is not entirely attributable to the performance of the companies in Buffett's portfolio. Similarly, investing in the same companies as those in his portfolio would not result in returns identical to those a Berkshire Hathaway investor might receive.[4] Its book value has outperformed the S&P 500 by 9.5 percent annualized over its 50 years of existence. However, this has come with its fair share of ups and downs. It has lagged the index in 11 of those years, including four of the last five years. Interestingly, Berkshire has beaten the index in every year in which the index yielded negative returns. This is where we see the dichotomy. You cannot have Buffett's style of investing and Madoff's consistency of returns rolled into one. Markets by their nature are volatile. A smooth upward sloping—almost 45 degree—performance graph with near-zero correlation to market movements is an investing unicorn. It just does not exist. No investor can possibly get every trade right or outperform in every market move.

This brings us to a behavioral bias known as loss aversion. Psychologists Kahneman and Tversky[5] have demonstrated through experiments that we feel the pain of loss almost twice as acutely as the pleasure derived from gains. Hence, investors (and their clients) go to great lengths to reduce fluctuations, often compromising on potential gains in the process. From Fairfield Sentry's inception (1991) through its closing (2008), the fund reported annualized returns of 10.5%. For the same period, Berkshire Hathaway's book value return was reported at 17 percent. *(Display 1).* The former as we know was achieved (read: manipulated) with negligible volatility. In fact, Madoff also realized this and is quoted as saying that the lack of volatility of his investments was illusory based on monthly or annual returns and that on an intra-day, intra-week or intra-month basis the volatility was "all over the place."[6]

Display 1: **Madoff, Buffett and the Index Performance**

Comparative Performance Track Record



Source: Bloomberg, Berkshire Hathaway Annual Shareholders' Letter 2014, Fairfield Sentry Fund Factsheet (November 2008), Marketed by NPB New Private Bank. Data as of September 2008. **Past performance is not indicative of future results.** Data is shown for illustrative purposes only and is not intended as a recommendation for any securities. Data shown is provided by the sources indicated. No representation or warranty can be given with respect to its accuracy or completeness.

It is this aversion to loss that leads many individuals to under-allocate their wealth to equities as an asset class. Stock prices are available with high frequency allowing an investor to mark-to-market his or her portfolio with every move on the ticker tape. Many investors prefer to invest in assets such as real estate, bank deposits or even art, because they cannot bear to see daily mark-to-market movements in their portfolios, particularly when the returns are negative. Professional investment managers and investment committees too succumb to the pressure of daily (or short-term) performance and may end up making investment decisions that do not achieve the desired returns over the long run.

To conclude, investors should expect to experience volatility when investing in an asset class like equities. Although it may be out of reach for many investors, is it better to follow an investment philosophy that one understands (á la Buffett) rather than succumb to the lure of stable but illusory returns (á la Madoff)? As they say, if something is too good to be true, it just might be.

[3] Source: Fairfield Sentry Fund Factsheet (November 2008), Marketed by NPB New Private Bank, Bloomberg. Data as of October 2008.

[4] Source: Berkshire Hathaway Inc., Annual Shareholders' Letter 2014.

[5] Daniel Kahneman. (2011). *Thinking, Fast and Slow.* Farrar, Straus and Giroux (U.S.), Allen Lane (U.K.)

[6] Madoff tops charts; skeptics ask how (May 2001). *MAR/Hedge.*

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S&P 500. The S&P 500, or the Standard & Poor's 500, is an American stock market index based on the market capitalizations of 500 large companies having common stock listed on the NYSE or NASDAQ. The S&P 500 index components and their weightings are determined by S&P Dow Jones Indices.

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Connecting the Dots

The Giant Sequoias

In his book *Breakout Nations*[1], Ruchir Sharma, head of Emerging Markets at Morgan Stanley Investment Management, writes that failure to sustain growth is the general rule among emerging markets. Only two emerging markets, he writes, have maintained a 5 percent annualized growth rate over five decades. Sustainability of growth is as much an issue for companies as it is for economies. Just as few emerging markets have been able to grow sustainably and become high income countries, so too few companies have been able to endure economic cycles and market fads to deliver performance, measured both in terms of earnings growth and stock price returns.

The holy grail of investing is to discover a mid-cap stock early in the game, sit back and watch it "grow" into a large-cap. Using an analogy from the plant world, just as every tree cannot grow to be as large as the giant sequoias, so too, not all mid-caps will follow a linear path of sustainable growth to become large-caps. In this piece, we look at trends of the last few years to observe that a high rate of attrition ensures that there are only a select few "giant sequoias" in the market.

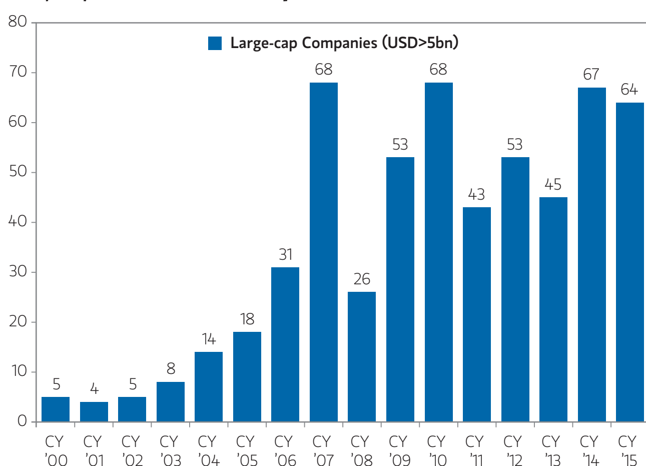
While there is no strict definition of market capitalization for mid-cap or large-cap stocks, we have used thresholds of US$5 billion plus for large-caps and a range of US$2 to US$5 billion for mid-caps. Based on these categories, there are 64 large-cap stocks and 71 mid-cap stocks today in India.[2] A look at past trends indicates, not surprisingly, that the stock count of large-cap stocks rises significantly during a strong bull market rally, as one or more sectors catch the fancy of investors and witness a significant valuation re-rating.

[1] Ruchir Sharma (2012). Breakout Nations. UK: Allen Lane, Penguin Group.

[2] Source: Bloomberg, Motilal Oswal Research. Data as of March 31, 2015.

The number of large-cap stocks in India rose from a paltry count of five in 2002 to 68 stocks in 2007. Interestingly, after falling to as low as 26 in the aftermath of the global financial crisis of 2008, the number is back to 64 *(see Display 1)*. More intriguing, of the 68 large cap stocks in 2007, only 36 continue to be on the list today, implying quite a significant churn in the list.[3] This high level of attrition indicates that while it is not only difficult to enter the elite group of large-cap companies, it is almost as difficult to remain in the group. Many stocks benefit from the adage “a rising tide lifts all boats” if they are in the right sector at the right time—as has been the case with the technology sector from 1997 to 2000, or infrastructure-related sectors from 2002 to 2007. Once the tide recedes few among the group are able to sustain the earnings trajectory or continue to maintain high stock price returns.

Display 1: **The Giant Sequoias**



Source: Bloomberg, Motilal Oswal Research. Data as of March 31, 2015

Now, let us take a look at the list of “contenders” in 2007, i.e., mid-cap stocks with a market capitalization in the range of US$2 to US$5 billion, which had the promise to grow into large-caps by now. Out of the 73 contenders only 14 have managed to move up the ranks to become large-caps, while 41 stocks actually slipped below the threshold of US$2 billion market capitalization. Stocks lose momentum for a variety of reasons. Many are able to grow spectacularly well when they start off from a small base. As size catches up, it becomes difficult to maintain the elevated rates of growth. Often constraints are imposed by the size of the business opportunity, the competitive intensity or the need to continuously reinvest cash flows. In some cases, a de-rating may be caused by management action such as a bad acquisition or unrelated diversification. Or some stocks may just fall victim to cyclical swings in the economy.

Display 2: **The Contenders**

How did the mid-caps of 2007 fare in 2015?

SECTOR	GRADUATED TO LARGE-CAPS	REMAINED AS MID-CAPS	FELL TO SMALL-CAPS
Consumer Discretionary	3	2	4
Consumer Staples	2	0	1
Energy	1	2	3
Financials	1	2	9
Health Care	3	3	0
Industrials	0	6	9
Information Technology	1	1	1
Materials	3	2	4
Real Estate	0	0	6
Telecommunication Services	0	0	2
Utilities	0	0	2
Total	**14**	**18**	**41**

Note: Largecaps USD >5bn, Mid-caps USD 2-5bn, Smallcaps USD <2bn
Source: Bloomberg, Motilal Oswal Research. Data as of March 31, 2015.

Many mid-cap funds are launched with the marketing pitch that smaller-sized companies will be able to compound their market caps faster. However, a look at the mid-cap indices suggests that over the last five and ten years, these indices in India have barely managed to outperform the frontline large-cap indices *(see Display 3)*.

Display 3: **Performance of Large-cap vs. Mid-cap Indices**

	1 YEAR (%)	3 YEARS (%)	5 YEARS (%)	10 YEARS (%)
Large-cap Indices				
MSCI India	24.5	15.5	8.2	14.7
BSE Sensex	24.9	17.1	9.8	15.7
CNX Nifty	26.7	17.0	10.1	15.4
Mid-cap Indices				
CNX Midcap	51.0	19.0	11.0	16.1
Nifty Midcap 50	36.9	13.6	4.6	10.1
BSE Midcap	49.5	18.6	9.2	13.1

Past performance is no guarantee of future results. All indices referenced are unmanaged and should not be considered an investment. It is not possible to invest directly in an index.

Source: Bloomberg. Data as of March 31, 2015 in local currency.

[3] Source: Bloomberg, Motilal Oswal Research. Data as of March 31, 2015.

This raises the question whether mid-cap investing in India is more about getting the sector themes right rather than buying stocks with a view that they will secularly graduate to becoming large-caps. The data quoted earlier does prove that linear extrapolation of stocks from mid-caps to large-caps is more an exception than a rule. If an investor is able to make early bets in themes that catch the fancy of the markets, and rotate out of them into newer themes before the old ones fade out, one can make outsized returns. But this involves superior insight and great timing. And of course, if one is able to pick the secular winners from this group, the rewards are spectacular. But more often than not investors end up chasing mid-caps that are already "hot" with the likelihood that future returns will continue to sustain for the medium to long term, are low.

To conclude, investors should recognize that attrition is often the rule rather than the exception, when they seek to discover the giant sequoias in the stock market.

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Stocks of medium-capitalization companies entail special risks, such as limited product lines, markets and financial resources, and greater market volatility than securities of larger, more established companies. Investments in foreign markets entail special risks such as currency, political, economic, and market risks. The risks of investing in emerging-market countries are greater than the risks generally associated with foreign investments.

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The MSCI India Index measures the performance of the Indian equity markets.

The S&P BSE SENSEX (S&P Bombay Stock Exchange Sensitive Index) is a free-float market-weighted stock market index of 30 well-established and financially sound companies listed on Bombay Stock Exchange.

The CNX Nifty is the National Stock Exchange of India's benchmark stock market index for Indian equity market.

The CNX Midcap Index captures the movement and serves as a benchmark for the midcap segment of the Indian equity market.

The Nifty Midcap 50 Index captures the movement of the midcap segment of the market. The index comprises 50 stocks listed and is also available for trading in F&O segment at National Stock Exchange (NSE).

The BSE Mid-Cap index tracks the performance of companies with relatively mid-size market capitalization and covers the performance of stocks between 80 & 95% of aggregate market capitalization.

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Connecting the Dots

Surviving in the Information Age

In August 2010[1], Eric Schmidt of Google said that "every two days now we create as much information as we did from the dawn of civilization up until 2003" and since 2010, the pace has only hastened. To put this into a Malthusian construct, human ability to meaningfully process information is growing at a snail's pace, if at all, and it has to contend with this steeply exponential glut of information. In today's world, apart from a voice call, one can count at least seven other methods, including Facebook walls and WhatsApp messages, as communication media. To think about it, from an era of once-a-week long-distance telephone calls or postal letters, we end up checking these sources of communication every few hours for new messages. It is not too different in the markets; just two decades ago, each company in India produced just an annual result and there were only a handful of research houses covering a handful of stocks. While Infosys changed that in 1998 with quarterly reporting, the pendulum has now swung to the other extreme. There are 48 analysts on average covering each of the 50 stocks in Nifty which means that every quarterly result season a harried investment professional has to contend with 2400 messages, just on the Nifty names.[2]

The retail investor does not have it easy either. Seven business news channels have burgeoned in the past fifteen years and, with a plethora of talking heads recommending new stocks by the minute, it is humanly impossible to keep pace. Gone are the days of eagerly awaited Chitrahaar[3] when as kids we were routinely subjected to a memory test of recollecting all the ten songs in the right sequence.

[1] Eric Schmidt (2010, Aug. 4), then CEO of Google Inc. and now Executive Chairman of the Board, spoke at the Techonomy conference in Lake Tahoe, California.

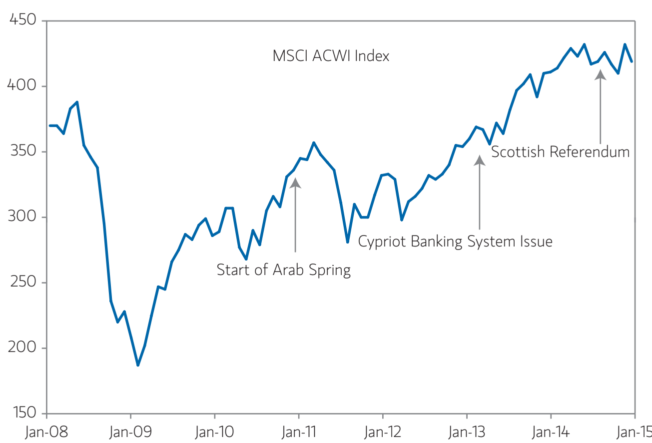
[2] Source: Bloomberg. Data as of March 2015. The CNX Nifty, also called the Nifty 50 or simply the Nifty, is the National Stock Exchange of India's benchmark for the Indian equity market. The index is unmanaged and should not be considered an investment. It is not possible to invest directly in an index.

[3] Chitrahaar (garland of pictures) is a Bollywood songs show on National Television that started in the 1960s.

Clearly from information hoarding we have to make a diametric shift to information choosing and it is not an easy transition. As professional investors, we have tried a few things to battle this barrage.

The most effective way of reducing information overload is self-analysis. Thinking back about what consumed a lot of time but eventually proved to be irrelevant, is a good starting point. In the past few years, we have spent time understanding the Scottish referendum, Cypriot banking system, intricate details of Middle Eastern regimes and their vulnerabilities but as an investor (as opposed to a day trader) it would be difficult to pin-point these events on the stock market chart *(see Display 1)*. Closer to home, at one point we obsessed over the impact of Mobile Number Portability (MNP) on the market shares of telecom operators or on de-regulation of savings bank rates on market share of deposits for large banks—neither events produced even a blip on these metrics *(see Display 2)*. We are prone to focussing on maintenance information which is more about next few days and weeks rather than think about long term trends. In words of the legendary Barton Biggs[4] "...I tend to set aside the reports and articles that I know I really want to read carefully, with the idea that I am going to go through all the maintenance stuff and the junk quickly and then focus on the heavyweight material. What happens unfortunately is that the maintenance material takes longer than it should and I end up carrying around the good reports in my briefcase ... In other words, I have processed the junk and haven't read the good reports."

Display 1: **Game-changers that weren't!**

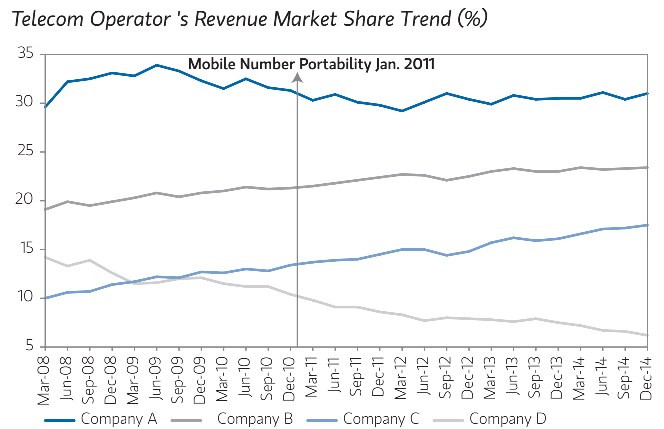


Source: RIMES, MSCI, Morgan Stanley Research. Data as of March 13, 2015.

Past performance is no guarantee of future results.

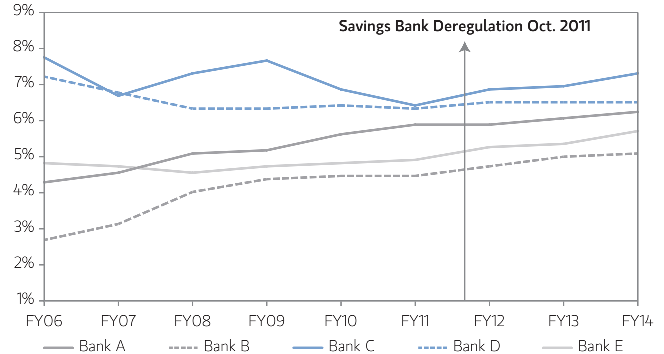
Display 2: **MNP and Savings Rate De-regulation**

Telecom Operator 's Revenue Market Share Trend (%)



Source: TRAI, Kotak Institutional Equities. Data as of December 2014.

CASA Market Share of Leading Banks (%)



Source: RBI, Macquarie Research. Data as of March 2014 . CASA accounts , "current account, savings account", are most prominent in middle and southeast Asia, and are an attempt to combine savings and checking accounts to entice customers to keep their money in the banks.

Guy Spier in his recent book, *The Education of a Value Investor*[5] talks about how he has split his office into a busy room with phones and computers and a library where no electronic devices are allowed. The library is meant for immersive reading or thinking. In our information gluttony, we hardly spend any time assimilating thoughts and in absence of a good digestive system that converts foods into useful nutrients, information consumption is just "garbage in, garbage out." It is in these sessions of information Sabbath that the probability of "eureka" moments increases. Remember, Archimedes was not hunched over his smartphone but was taking a long soaking bath when that flash of brilliance came.

[4] Barton Biggs (2014). *Biggs on Finance, Economics, and the Stock Market.* New Jersey: Wiley & Sons, Inc.

[5] Guy Spier (2014). *The Education of a Value Investor.* New York: Palgrave Macmillan.

As Charles Assisi pointed out in his recent column,[6] when social media is the primary source of information, there is a risk of getting into an echo chamber like environment. Algorithms highlight and push information and opinions similar to what one has consumed in the past, making all inputs monochromatic. It is essential to seek out information that is contrary to one's beliefs which in investing terms means reading the sell reports on your largest portfolio holdings first.

In the field of chess, it is now fairly well established that a combination of man and machine is superior to either of them. Use of technology can definitely improve one's ability to sort through information. Michael Mauboussin[7] highlighted this in one of his recent reports that aiding one's bottom -up stock picking with quantitative screeners will likely enhance results and so will seeking out information through internet alerts or Twitter, rather than passively consuming whatever is being pushed to you.

Finally, the most important skill is to let go—reconciling to the fact that there will always be many things out there that one possibly cannot know about. The insecurity that one is missing a vital piece of information leads to mindless consumption. It is like spotting a pasta table tucked away in a corner at a wedding reception, after having finished dessert. Have you missed out on the best dish in the buffet? Will you grab another plate or be content with the fact that you have already had a good meal and cannot consume every offering on the menu?

While the era of information overload might be a recent phenomenon, Sherlock Holmes nailed the issue about 125 years ago. When Watson chides him for not knowing that the earth goes around the sun, Holmes says that one's mind is like an empty attic and one should be very careful about what one stores there. Whether the earth goes around the sun or the moon is of the least consequence to him and his work. Attaining a Holmes-like Zen state of information processing is a tall ask, but that should not deter anybody from making a start.

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[6] Charles Assisi (2015, Feb. 6). "Why I hate Facebook". *Mint*. Retrieved March 14, 2015 from http://www.livemint.com/Home-Page/TEgpXVcyApp8VAupinxChP/Why-I-hate-Facebook.html

[7] Michael J. Mauboussin & Dan Callahan (2014, Sep. 10). " Lessons from Freestyle Chess." *Credit Suisse Global Financial Strategies.*

Connecting the Dots

A Fine Balance

Though originally attributed to Voltaire, it was the movie *"Spiderman"* that immortalized the line, "With great power, comes great responsibility".[1] To tweak that a bit to suit the current context, it was "great promise" that had created heightened expectations. Every year budgets in India come and go, but big expectations had been building up ahead of this budget owing to the Prime Minister's statement last November that it should be full of new ideas with transformational and measurable deliverables. Come February and markets had opted to shrug off a pretty dismal earnings report card for the third quarter of fiscal 2014-15 and trained their sights on the budget with the benchmark Nifty being up 7 percent year-to-date,[2] in anticipation. When expectations are running high, it often sets the stage for a disappointment. The roller coaster movement of the market on Budget Day suggests that it may not have fuelled the urge for instant gratification of those market participants who had made concentrated bets on specific sectors in the hope of big bang announcements. In fact, much like the Railway Budget that sought to lay a roadmap for the years to come, the Union Budget also made attempts to look beyond the immediate fiscal year. Lower corporate taxes in the coming years, simpler exemption framework, abolishment of the wealth tax and clarification on issues like GAAR[3] have all been steps in the right direction.

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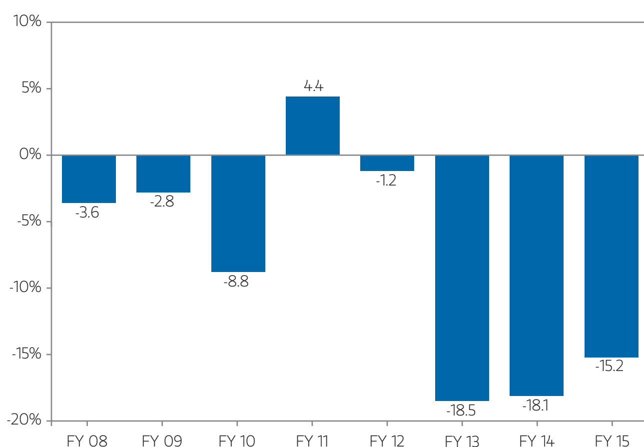
[1] Voltaire, a French enlightenment writer, historian, and philosopher.

[2] Source: Bloomberg. Data as of February 27, 2015. The CNX Nifty, also called the Nifty 50 or simply the Nifty, is the National Stock Exchange of India's benchmark for Indian equity market. The index is unmanaged and should not be considered an investment. It is not possible to invest directly in an index.

[3] GAAR refers to General Anti-Avoidance Rules and relates to the topic of tax avoidance.

Markets were focused on whether the government would use the serendipitous gains from lower commodity prices for kick-starting the sluggish investment cycle and whether the fiscal deficit targets would be loosened a bit to accommodate counter-cyclical spending. Recognizing the need that the government will have to do much of the heavy lifting before the private sector can contribute, the budget has given an appreciable push toward capital spending. The capital expenditure at Rs. 2414 billion is estimated to grow 25 percent over the current year's revised estimates.[4] It should be noted that in the current year, the central government will end up spending 15 percent lower on capital expenditure versus budget estimates made last year (see *Display 1*.)

Display 1: **Capital Spending: Missed Targets versus Budget Estimates**



Source: Budget documents, Macquarie Research.

So while next year's number may still appear to be below 2 percent of GDP, it is important to actually spend what is budgeted. Moreover, the public sector undertakings and the states which are benefitting from higher devolvement of taxes should also contribute to increasing capital spending. In that context the 14th Finance Commission recommendations are path breaking, particularly in the context, that studies have shown that state level capital spending often results in a higher GDP multiplier for the economy.

This budget is a fine balance between social spending and capital spending. Markets were probably building a more decisive tilt towards the latter, almost a 180 degree shift from the stance adopted by the previous government. The crux of the issue lies in the implementation of both social programs and infrastructure projects. The attempt to plug leakages and make the economy cashless through direct benefit transfers and encouraging use of credit cards are steps in the right direction.

Overall, the fiscal estimates appear quite credible. Gross taxes are expected to grow about 16 percent[5] which appears realistic considering the revision in rates for excise and service tax. Also, the fact that a provision has been made for fuel subsidies despite lower crude oil prices is encouraging. Moreover, controlling revenue expenditure to 3 percent[6] over the current year will be a step in the right direction. All in all, we believe this budget, unlike many in the past, will be remembered for its credibility, clarity and for setting a roadmap for the future.

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[4] Source: Budget documents. Data as of February 2015.

[5] Source: Budget documents. Data as of February 2015.

[6] Source: Budget documents. Data as of February 2015.

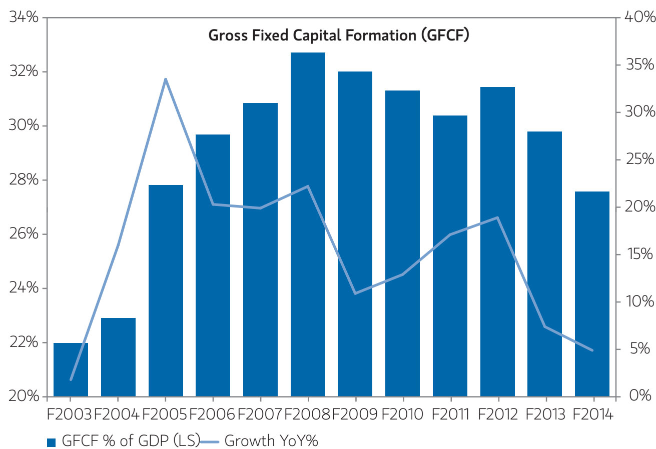
Connecting the Dots

Putting Serendipity to Work

One glaring difference in the current cycle of growth in India versus that which began in 2003 is the absence of pick-up in investment outlays. The reasons are not difficult to fathom. State-owned banks that comprise over 75 percent[1] of the banking system's outstanding loans are constrained in their ability to lend. Neither has the formation of bad assets ebbed, as is being evidenced in their latest quarterly reports nor have they been able to raise adequate capital to accelerate lending. On the other hand, entities involved in undertaking large capital expenditures in the previous cycle are still shedding assets from previous excesses or do not find the demand environment viable enough to commit new money, especially in commodity-related areas. India's investment ratio (Gross Fixed Capital Formation-GFCF as a share of GDP) soared from 23.7 percent in F2003 to almost 33 percent in F2008 but has since declined to 28.5 percent. Average nominal GFCF growth for the past two years has been a paltry 6 percent and barely positive in real terms *(Display 1).* Hence, the question that we have often grappled with is who will lead and who will lend to the next investment cycle in India.

[1] Source: RBI, IBA. Data as of March 31, 2014.

Display 1: **India's Dwindling Investment Ratio**



Source: CEIC, Morgan Stanley Research.

We recently watched the movie "The Imitation Game", based on the life of famous British cryptographer Alan Turing. Turing cracks the almost-unsolvable German Enigma machine's code based on a chance conversation that makes him realize that a few letters in the coded messages always correspond to the words "Heil Hitler". Sometimes solutions to most vexing problems are born out of a totally unconnected happenstance. Towards the end of 2014, crude oil prices started declining materially. From $115 per barrel in the middle of June, they are at $55 per barrel[2] now. The salutary effect of this on India's external deficit as well as inflation dynamics is quite well known. What this has also done is created headroom within the fiscal mathematics for additional spending. This fact seems to be underappreciated due to tightness thus far in F2015 as almost the entire budgeted fiscal deficit has been used up with three months to go in the financial year. Moreover, popular perception is that if fiscal targets as laid out in the Fiscal Responsibility and Budget Management Act (FRBM) are to be met, there would be limited elbow-room for fiscal spending. However, a combination of lower net subsidies from fuel and fertilizers along with rationalization of some welfare schemes could create a meaningful space for additional expenditure, even while remaining within the FRBM limits. The two heads that contribute to this are expectedly, higher excise collection from recently hiked excise duties on petrol and diesel and lower subsidy burden from fuel and fertilizers. Both put together, in our opinion, create fiscal maneuverability to the tune of about 0.9 percent of GDP. For these calculations, we assume oil at $75 per barrel and importantly, stay within the fiscal deficit of 3.6 percent of GDP as originally envisaged for F2016 *(Display 2)*.

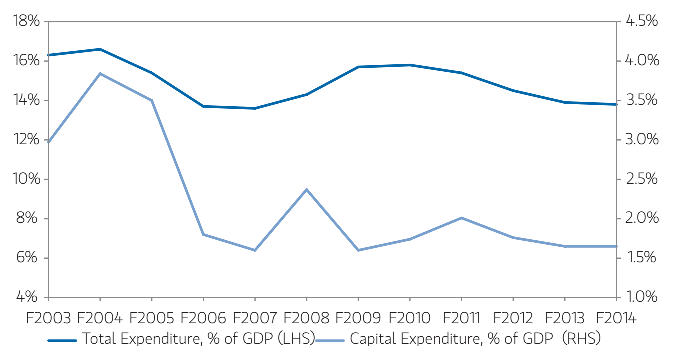
Display 2: **Fiscal Headroom**

	F15BE	F16E	Change (YoY)
INR (bn)			
Increased revenue from Excise Duty hike	203	725	522
Savings from lower fuel subsidy	530	44	486
Savings from fertilizer subsidy	730	604	126
% of GDP			
Increased revenue from Excise Duty hike	0.16	0.51	0.35
Savings from lower fuel subsidy	0.42	0.03	0.39
Savings from fertilizer subsidy	0.58	0.43	0.15
Total			**0.89**

Source: Budget Documents, BE=Budget estimates, Morgan Stanley Investment Management estimates.

It is natural that whenever there is a windfall gain, claimants who profess to be the most deserving start crawling out of the woodwork. The Government would be hard pressed to allocate the gains between competing demands of corporates and/or individuals for lower taxes, sops for various sections of the economy or even higher subsidies and welfare spending. However, given the hamstrung capital investment cycle, the most prudent way to allocate this windfall would be towards fixed capital formation, primarily in the infrastructure space. It is interesting to note that public spending as a share of GDP has remained in the 14 to 15 percent range for last few years. However, as *Display 3* shows, the share of capital expenditure within that has shrunk from 2.4 percent in F2008 to 1.6 percent in F2014.

Display 3: **Central Government Expenditure**

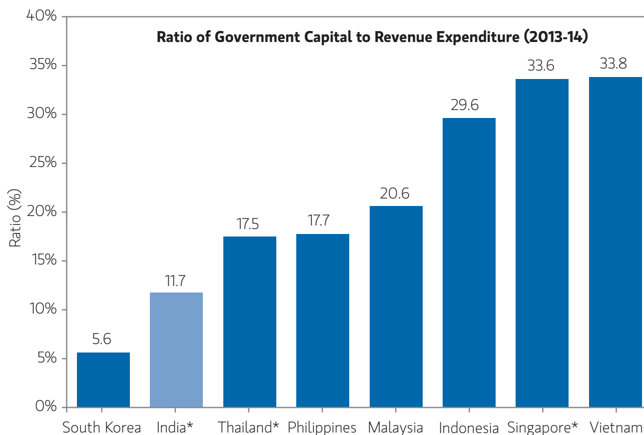


Source: CEIC, Morgan Stanley Research.

[2] Source: Bloomberg. Data as of Feb. 5, 2015.

Data from HSBC shows that within our peer set of Asian economies this is one of the lowest *(Display 4)*. In other words, over the past few years, the skew of Government expenditure has moved towards revenue spending with lesser amounts being allocated for capacity creation or augmentation. This has been part of the reason for chronic, high inflation that the economy had to withstand in the past few years. We think it is time to correct this mismatch. While the current Government has stated its desire to rein in some of the welfare and subsidy spending, there is a need to reallocate that money towards capital expenditure that can be implemented quickly and will likely have a high multiplier on growth and job creation. Even if the mix is re-adjusted to the average of last decade, it could make an additional 0.4 percent of GDP available for capital spending. Coupled with the gains from lower subsidy and higher excise, it could lead to a meaningful push worth about 1.3 percent of GDP in a single year.

Display 4: **Low Government Capital Expenditure**



Source: IMF Article IV Consultation - Staff Report respective countries, HSBC Securities.

Note: *Denotes values reported in fiscal year terms. General Government includes Central and State Governments, except Malaysia and India (Central Government).

To be sure, this is not a Keynesian policy recommendation of people being paid to dig holes and then fill them up. This is more about judiciously using the windfall, re-orienting the budget spends and kick-starting a part of the economy that is tied up in a gridlock. Skeptics worry that a fiscal push of this kind may be inflationary in the near term and reverse the gains that the Reserve Bank of India has achieved in quelling inflation, causing the hopes of a monetary easing cycle to be still born. We think, however, that downward pressure on prices from slowing global demand would counter-act the near term inflationary pressures, if any. If all the pieces of the jigsaw were to fall into place, we could have that rare confluence of pro-growth fiscal and monetary policy for some time to come.

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